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Original Correspondence.

IMPROVEMENTS IN COPPER SMELTING.

CONDENSATION AND UTILISATION OF COPPER SMOKE.

SIR,—I feel bound to return you thanks for the very laudatory remarks on my Copper Ore Calcining Furnace, in your second article on "Copper Smoke," published in last week's *Mining Journal*. The furnace, in full operation, have now been open to the inspection of copper smelters for over three years; 20,000 tons of ores, Irish, Cornish, and Spanish, have been calcined in them; and 95 per cent. of the sulphur evolved converted into sulphuric acid. The furnaces present no difficulty; are simple in construction and operation, require less labour than the present mode of calcining, the ores are all calcined as they come from the mines, and some of the furnaces have acted for two years without repair. I do not mean to speak disparagingly of Gerstenhöfer's patent, which seems a beautifully ingenious mode of effecting the object, and is highly adapted to a model smelting works; all I can say is that it has no advantages mine does not possess, and mine has several of which it is deficient. The adaptation to all kinds of ores, as you have well put it, is one of these—I calcine stamped ores in fine powder, crushed ores (the general form of Cornish ores), and rough ores in sizes up to that of an egg—all receive similar treatment. You have somewhat misunderstood the patent of myself and my son, of 1864. We do not place the smelting furnace under the calciner; this would, indeed, be not a doubtful arrangement, but a radically bad one. We so attach the calciner to the ordinary smelter that the draught, or waste heat, after leaving the smelter at the ordinary orifice over the rabbling-door, instead of going direct to the chimney, is passed along under the bed of the calciner, and without in the least affecting the draught of the smelter, yields ample heat for calcining in the one furnace. So arranged, 25 to 30 tons of ore per week being all that the attached smelter can work. Now, in the ordinary calciner not only is fuel largely required for calcination, but the ore has to be drawn out and drenched with water before removing from the calciner to the smelter; and in Gerstenhöfer's furnace, although fuel is chiefly dispensed with, yet the ore must fall down in a red-hot state, and will have to be removed and drenched before using. All this we have made a thing of the past. From our combined calciner the ore is at once transferred by the workman with his slice down an easy inclination, in a red-hot state, right into the middle of the bed of the smelter, and is, of course, melted in one-fourth the time taken by a drenched charge of ore. Gerstenhöfer's furnace does not provide for this. But, again, while copper ores poor in sulphur can at once be safely heated to a high red-heat, such rich ores as the Cobre, Spanish, or Portuguese would, if suddenly heated, inevitably flux. Regular, which all ought to be calcined, and its fumes condensed, is of a similar character. Any sudden heating of these would result in clotting. Now, my furnace gradually heats the ores for some hours before reaching the highest temperature, and clotting never takes place either with rich ores or regulus. Thus, the ore charged into the calciner is calcined without the expenditure of an atom of fuel, one furnace calcining all required by one smelter, and the raw ore never coming out till it comes out as regulus and slag. This arrangement has been twelve months in successful operation.

I have been rather surprised at the prominence now given by the Messrs. Vivian to the necessity for copper smoke condensation. Though they were fully aware at least two years ago of the existence of my furnace, and I think must have known that it had obtained the unqualified approval of Dr. Percy, the highest scientific authority on copper smelting, yet they have never favoured me with a single enquiry regarding it. I certainly never brought it before them, which I should have done had I known they were so desirous to effect the object; but having had it before another equally large smelting firm, who highly approved of my plan, but said they were not "manufacturing chemists," and could not think of becoming so, and having applied to another firm who offered to sell me their works, but who asked a price about three times what I could have erected them for, my ardour in the abatement of copper smoke was cooled, and I left the copper smelter to the force of events. This has now become rather a strong power, and no doubt Messrs. Vivian are wisely yielding to it, and at the same time are, with equal wisdom, trying to keep in the van by somewhat trumpeting a patent of which they are the possessors.

Let, however, the best furnace gain the day. I need not say I am willing to submit to this, for I have no choice; on their merits both Gerstenhöfer's and mine must stand or fall; and not even the fact that one of the largest of the smelting firms has committed itself to the one without having investigated the other will secure to that the general preference. Messrs. Vivian are now, like myself, interested parties; and, while both of us may be heard, neither of us need expect that what he states will be received as decisive of the question. To the ordeal of a fair competitive trial I am willing to submit.

As to the facts which demand a change in copper smelting, and which have long demanded it, they should be reiterated to command attention: 5000 tons of copper ores are smelted weekly, chiefly at Swansea. These ores average 24 to 28 per cent. of sulphur. This is equivalent to at least 3300 tons brown oil of vitriol, and this weight I should undertake to produce from them. The present value of this weekly quantity is 9900*l.*, now all dissipated in poisonous copper smoke. This acid would meet the requirements of our staple chemical manufactures, or nearly so; while these manufactures have never been so pressed for a supply of sulphur ores as now. Spain, Portugal, Germany, Belgium, Norway, and even Iceland are being ransacked, but have so far failed to yield them in sufficient quantity. Shall this dearth on the one hand, and needless waste on the other, continue? The public must decide, for, until pressed, the copper smelter will not move out of his old groove.

Manchester, Oct. 8.

PETER SPENCE.

DOES COAL EXIST NEAR LONDON?

SIR,—Some years ago I was at Brighton, when I heard that they were digging for the construction of a dock at Shoreham, and that they threw out a quantity of black earth, which when exposed to the air for a few days took fire, and so alarmed some of the inhabitants that they left the neighbourhood. I went there on purpose to see it, and was surprised to find that a seam of coal about 3 yards thick had been dug out; it was in a very soft state, as all coal seams are when they crop out in a wet place, and it also contained a good deal of nodules of pyrites. I noticed the seam dipped gently from the shore, and have no doubt that if a shaft were sunk 300 or 400 yards from the shore, that at 150 feet this seam of coal would prove very valuable, and eventually be found much nearer

LONDON.

DOES COAL EXIST NEAR LONDON?

SIR,—I dare say it is 15 years since I advocated in your *Journal* the probability of finding coal at a workable depth near London, and I am glad to notice that the opinion is gaining ground. I am also glad to notice your correspondent, "H. E.," leans decidedly to the opinion, and the data he gives are encouraging. I hope it will be discussed thoroughly in your columns, and all the available information on such an important matter carefully collected.

I shall confine my present observations to meeting "H. E.'s" objections to my scheme for raising funds; and, first, as to its being bad in principle. It must be borne in mind that I am supposing while there is a chance to find coal there is also a great chance not to find it. All that is held out in the meantime is, that its geological situation is under the surface stated, and the bore proposed is a legitimate mode of ascertaining at that point what measures will be found in a bore of the depth proposed. If "H. E." was a mineral proprietor, he would find that it is frequently necessary—and, indeed, in a doubtful field it is always necessary—in the first instance, for the landlord to put his hand in his pocket and put down one bore, proving the general character of the field, and its position in the geological formation to which it belongs; this done, the tenant, or proposed mineral worker, comes in, and makes his bargain, conditionally, that on further trials proving satisfactory he will win, work, and carry away at a certain royalty: this fixed, he puts down bores to ascertain the dip and rise, the continuity, and other matters, which he can only prove in this way. But almost invariably the mineral proprietor, if it is a new district, and he wishes to make his field known, must himself put down the first bore. If this be necessary in a mineral field in the coal measures, how much more so it is necessary when you are trying to solve a new problem in geology? and I again respectfully submit that it is a venture of that kind which might properly be supported by a Government grant.

I think I am also right in assuming that if one trial bore proved that the measures lie as I suggested in my letter, and as "H. E.'s" quotations agree with, I have no doubt parties would then be found to follow up the search on the same terms as other minerals are leased; and the question

now follows—Is the 30,000*l.* sufficient? The amount of scientific knowledge required would be much less than your correspondent anticipates. All that would be necessary would be to fix the site, and then he could scarcely go wrong. It might be in the centre of St. Paul's Church-yard, or it might be within 10 miles of it; so that if we put down 400*l.* for mining advice we would not be far wrong.

The only next thing is the bore, and that is a thing of mechanical skill, and we have fair enough data to go by. In the mining district bores are put down by manual labour for 5*s.* per fathom for the first 5 fathoms, 10*s.* per fathom for the next, 15*s.* for the next, and so on; but I believe when worked by engine-power they are only one-half of the above rates. At the former rates a bore of 800 fathoms would cost 16,100*l.*, to which add 400*l.* as above, making in all 16,500*l.*, which leaves 13,500*l.* for contingencies necessarily attendant on a bore of this depth. I have no doubt that parties will readily undertake the work for the sum asked.

I trust your correspondent's fears are unwarranted, and that he will see, at all events, that under all the circumstances Government might be asked to do something. The bore might be on their own property and, next, that the sum asked would be ample for a bore of the depth indicated.

R.

DOES COAL EXIST NEAR LONDON?

SIR,—The similarity between the mode of deposit in the Belgian coal field, and at least in one portion of that of Somersetshire, is so striking that it is almost impossible to attach too much importance to the details published by Mr. Greenwell. After carefully looking at the sections given in "H. E.'s" letter in last week's *Journal*, the identity of the two deposits cannot, I think, be longer doubted. Hitherto the tendency has been to expect that those who entertain the hope of the existence of coal beneath the southern counties should prove every inch of the ground before asking any credit for their arguments. Now, however, Mr. Greenwell has given such ample proof of the probability of the Somersetshire field being only the western continuation of that of Belgium, that we may ask that henceforth the despairing, who suppose that all that will be has been discovered, shall be required to prove that the coal does not exist before condemning the project of developing the Surrey, Sussex, and neighbouring coal fields as utopian, and sure to result in failure. No doubt Mr. Greenwell could furnish many more particulars than those which have already appeared in the *Journal* for the benefit of those who may feel inclined to carry on the researches he has so nobly commenced, as he may thus be the means of prolonging the period of the existence of England's commercial greatness, and become a lasting benefactor to his fellow-countrymen.

When we consider that we are now exhausting our supply of coal at the rate of nearly 100,000,000 tons per annum, and that this quantity is steadily and gradually increasing, it must be obvious that it would be for the advantage of the nation at large to have every probable district thoroughly explored for coal. That the assistance of the Legislature may be sought to facilitate the sinking of trial shafts or borings I do not doubt, and now that the exhaustion of our coal fields really appears to be within a comparatively short period, I should think Parliament would be disposed to look upon the matter with favour, but the idea of the works being undertaken by Government itself, or upon any system which would commit the country to the payment of even 30*l.*, much less 30,000*l.*, before the coal is actually discovered, would be objectionable in the extreme. Let the explorations be made by private enterprise, and, upon success being attained, the explorers should be handsomely rewarded. If the Government choose to fix the precise terms upon which the explorer shall be remunerated let them do so, and if these terms were reasonable, and were extensively published, no difficulty would be experienced in finding the necessary capital for carrying out the necessary works. Let some of your more ingenious correspondents endeavour to devise a means of inducing the public to undertake the work for the benefit of the public, and with the prospect of profit to themselves, and we shall speedily have bore-holes studding the entire district from Bristol to Dover.

When railways were first proposed it was thought that they could not be carried out, except by interfering to an unjustifiable extent with the rights of individuals, and I opine that the obstacles to securing the opening out of our southern coal fields will, in practice, be proved to be incomparably less than those which were successfully overcome more than a century since in the case of railways. The energy and ingenuity of Englishmen only require to be called forth to secure the best results.

Horsham, Oct. 2.

A WOULD-BE SUSSEX COLLIER.

ORE-DRESSING, AND MINING.

SIR,—If you will kindly find a space in the *Journal* for a few remarks, I may be able to make from time to time on Mining, I shall feel obliged, my object being to call attention to a better mode of dressing and mining in the North of England.

The dressing of ores of various classes from different mines very properly claims special attention in almost every locality at the present time. In order to become better acquainted with what is going on, I have had a look at the Devon and Cornish mines, where I am somewhat surprised to notice the various appliances and simple arrangements brought into use within the last few years for the better separation of ores.

Devon Great Consols, the wonder of the world in mining, with its enormous piles of ores, immense fields of machinery in motion, and the iron horse, or locomotive, rushing to and from the mines, with its ores and stores to the shipping port, I will not attempt to describe; suffice it to say, really and truly, it is a wonder of itself in every shape and form.

On the Cornish side of that beautiful River Tamar stands Drake Walls, a tin and copper mine of ancient date, but principally tin ore of extraordinary forms, and peculiar of itself. Here the ores are separated at the pit's mouth, or top of the winding-shaft, into several classes, by self-acting cross-heads, or riddles; from thence, after picking and breaking, it is sent on by trams to a powerful crusher, attached to which is a self-acting waste-gauge sieve, of suitable size to take the ore; through this the crushed ore passes into a flow of water, the pulverised ores are at once washed to a series of funnel-shaped iron separators; the coarse, or rough, ore and grit passes through an opening at the foot of the separator to a series of trays below; at the same time the fine class ore, with the assistance of an injection of water from an opposite angle, flows over the head of the separator, and passes on to the rotating baffle, of which there are many in motion; over this the different classes of ore are passed with the most perfect steadiness of action and perfection of motion. The separation of ores from the waste is as extraordinary as it is simple, being almost self-acting; the expenses are reduced from a third to one-half of the ordinary cost. Full 3000 tons of lodestuff are drawn out of the mine monthly; the new process enabling the company to work poor ores and slimes, which were formerly considered valueless. Almost every class of ore, wolfram, mundic, copper, &c., seems to be turned to account, in a commercial point of view. Even the black water from the Wolfram ores, which usually ran to waste, is now made marketable, and its metallic contents find a place in chemistry and the arts.—*Twistock, Oct. 4.*

A NEWCASTLE MINER.

THE MINERAL WEALTH OF IRELAND.

SIR,—Your article on Ireland, in last week's *Mining Journal*, has given great pleasure to persons who are acquainted with, or interested in, mining pursuits in that country. No doubt can be entertained but Ireland possesses vast mineral treasures; every authority asserts the theory, and every adequate trial proves the fact. It is well the county of Monaghan is about to have its proper share of capital expended: the cases mentioned are most satisfactory. The remains of old lead-works abound in many districts; antimony lodes of superior quality, being highly argentiferous, are known to exist, and have been worked. We hear of several mines being about to be opened, and trust the wicked, suicidal Fenian movement will not deter British capitalists from prosecuting their properties. They may depend on it the reaction that must follow the vigorous measures now being adopted by the Imperial Parliament will stamp out all the fiery notions of the most ardent member of the unworthy brotherhood, and so put on the extinguisher that not a vestige of a spark, or even the ungratifying odour of a dying out taper, will be allowed to remain.

In addition to the mines in Monaghan, we learn that the copper and lead mines at Oola have just been announced to be wrought by an influential company, the directors being chiefly residents in Ireland. This is as it should be, and is another step in the right direction; we trust that these steps may be followed. In the *Journal* of Sept. 23, the words "a step in the right direction" were applied to a new magazine to be published in Dublin on industrial economies. This is, indeed, not only a right step, but a most valuable one, and all true-hearted Irishmen can but wish it entire success.

You, Mr. Editor, do Ireland no small service in keeping its interests so

prominently before the public, and I consider the Irish public greatly indebted to you for your powerful advocacy.

Sandymount, Oct. 4.

THE GOLD FIELDS OF NOVA SCOTIA.

SIR,—The remarks contained in the letter of Mr. P. S. Hamilton, Chief Commissioner of Mines in Nova Scotia, which appeared in last week's *Journal*, are, doubtless, well founded, and it will probably be gratifying to numbers of the British public to learn that at this moment a British colony, to those of California or Australia. These gold fields equal if not surpass less worked since 1862, chiefly by persons in humble circumstances, many of whom have lacked the necessary capital to purchase machinery for crushing the quartz, which has been found to contain large quantities of gold. The returns, therefore, to the Government in the shape of royalties have been hitherto comparatively small, but there is great scope for enterprise in gold mining throughout the different districts of Lunenburg, Oldham, Waverley, Kenfrew, Isaacs Harbour, Wine Harbour, Tangier, Launceston, Town, Sherbrooke, Birch Cove, and many other unexplored districts examined by Prof. Campbell, of Halifax, and reported on by that gentleman in February, 1863. This report, made to his Excellency the Governor of Nova Scotia, shows that at that period he had discovered gold in the various districts above mentioned, extending over a space of 55 miles in the Atlantic coast. Since that time auriferous deposits have been found in many other localities, and it seems that the only things required to render this country productive of an immense amount of gold are capital and scientific mining. These will, probably, shortly be forthcoming, and a new field opened for mining labourers, who are much needed in the colony, those already engaged having had but small experience in the business. I have alluded generally to the poorer class of mines worked without capital. There are, however, many rich mines in the districts of Isaacs Harbour, Sherbrooke, Oldham, and Waverley. At the last place there is, undoubtedly, the richest gold mine in the world, as is proved by the results of the last year's working. It is a common event for the proprietors of this mine, who are better known as "the German Company," to send down fortnightly what is termed a "brick" of gold for sale at Halifax. In proof of this I send you extracts from local papers on the subject, showing the last two months' workings:—

(From the *Acadian Reporter*, published at Halifax on Friday, August 4, 1865.)
"LOCAL ITEMS.—MORE GOLD.—We saw on Wednesday another brick of gold which was exhibited by Mr. Buckner, the agent of the German Company's diggings at Waverley. This ingot was said to be worth over \$15,000. It was the yield of 14 days' work, when the precious metal is brought to the metropolis in 'bricks' so frequently there is but little doubt in the mind of any person that our gold mines rest upon a solid foundation. It would be interesting to have a statement of the exact amount produced from the German Company's claims since their first opening."

(From the *Morning Chronicle* published at Halifax on Thursday, September 7, 1865.)
"There was an exhibition yesterday at the Merchants Exchange Reading Room of a block of refined gold about 1 foot long, 4 inches wide, and nearly 3 feet thick, weighing 1025 ozs. The value of this mass is upwards of \$20,500. It is the result of one month's operations of the German Company at Waverley."

I have no desire to trespass on your valuable space, but thinking it only right that the public should be posted up a little on these matters, I have supplied you with such information as my constant correspondence with the colony enables me to furnish.

Courtland-terrace, Kensington, Oct. 2.

THOMAS EVANS.

GOLD MINING IN SOUTH AMERICA.

THE FRONTINO AND BOLIVIA GOLD MINING COMPANY.

SIR,—I venture to ask permission to address the shareholders of the Frontino and Bolivia Gold Mine, through the *Journal*, in consequence of the attempt to depreciate the value of their shares in the Mining Market, and to induce holders to part with them at a low price. I think I can assure the possessors of their safety in holding, and point out to demonstration that their investment at 5*l.* was a sound one.

Captain Goyen, whose skill as a mining captain is well known, extracted last month from the Bolivia Mine between 16 and 17 lbs. weight of gold, the produce of 12 stamps out of 60, working one-third of a month, at little more than half-speed, upon what he calls inferior ore. We will, therefore, take as our basis of calculation the least favourable parts of his report, and when the whole 60 heads of stamps are in position (which they will shortly be), we may expect safely as follows:—The produce of one-fifth of the number of stamps was 16 lbs. for one-third of a month, which equals 48 lbs. per month, and with 60 stamps 240 lbs., which, at 40*l.* per lb. weight, gives 9600*l.* for Bolivia only, leaving Frontino entirely out of the calculation, from whence a remittance was received by the last mail of 152 ozs.; this gives for the whole year 115,000*l.* (say) 100,000*l.*, or 20 per cent. on the paid-up capital, and 40 per cent. to the buyers at 5*l.*

NOT A BROKER,

BUT A SHAREHOLDER, AND ONE WHO KNOWS SOUTH AMERICA.

GOLD MINING IN SOUTH AMERICA.

THE FRONTINO AND BOLIVIA GOLD MINING COMPANY.

SIR,—The splendid results which have accrued to the operations of the Frontino and Bolivia Mining Company have, it appears, created the usual amount of antagonism on the part of those gentlemen connected with the mining interest who are recognised as "constitutional bears," and who do not hesitate, by a little skilful combination, to temporarily depress the price of shares, in order that they may "buy back" at the reduced value, and thus laugh at those unfortunate shareholders who are foolishly frightened out of their holdings through ignorance of the operations brought to bear against them.

Not only are the Frontino and Bolivia properties, in my belief, destined to take the highest rank amongst gold-producing mines, but it is well known that the shares being rapidly bought up as permanent investments, and without the slightest regard to present prices. There can be no reasonable doubt existing that a much greater value will soon take place in them, based upon results from actual operations, the several of which has just arrived by the last mail, in the shape of a remittance of 152 ozs. of gold from the Frontino Mine, and the following most important information from the Bolivia property. Under date August 7, Capt. Goyen writes:—

"The produce for ten days in last month was 16 lbs. 7 ozs. of fine gold, and would please to observe was from 12 heads supplied with inferior mineral, and worked very little more than half speed, so you can judge what will be the result when we get into a regular course of working."

There are 60 heads of stamps now on the mine, and as we know that the mineral is practically inexhaustible, and its value confirmed beyond doubt, the following calculation results must ensue:—A monthly produce of 290 ozs. of fine gold, giving in round numbers a value of 11,500*l.* sterling. This is from Bolivia alone, but Frontino is, doubtless, equally valuable.

It appears that as the property is developed there will really be no limit to the immense returns which will be made. There are numerous parallel lodes in the mine which will shortly be laid open, and steam-stamps erected in various parts of the property, which, it will be recollected, is about five miles in length on the course of the mine, and which lodes give an average produce of 2 ozs. of gold per ton, or four times as much as the St. John del Rey ore. My belief is that by the end of this year the value of our shares will be from 10*l.* to 12*l.*, and are long will be realising 15*l.*; and even at the latter price the entire property (freehold) will not be selling for as much as the St. John del Rey Mine some three years since.

The practical evidence of the value of the mines is the fact that our excellent manager, Capt. Goyen, has always spoken in the most confident manner of the great value of the mines, and that he holds a very large interest in the undertaking as a permanent investment. Every mail has confirmed the previous advice, and the very latest of the most encouraging and gratifying character.

In conclusion, I would at once advise all my co-shareholders to take advantage of this ridiculous and impudent attempt on the part of the "bears" to depress the value of the shares by increasing their present interest. By so doing I am convinced they will be amply rewarded in seeing a most material advance in the value of their property, and I have no hesitation in saying that before the arrival of the mail this month all who adopt this suggestion will have great cause for congratulation.

Oct. 4.

A LARGO SHAREHOLDER.

SAN PEDRO DEL MONTE MINING COMPANY.

SIR,—A correspondent in the *Mining Journal* of Sept. 30, under the signature of "Silver," asks for some information respecting the above mine, which I herewith venture to supply, so far as I am able. I find, then, from the prospectus, the title of the mine to be the San Pedro del Monte Silver Mining Company, Limited under the Companies Act, 1863, by which each shareholder's liability is limited to the amount unpaid on his shares. Capital 75,000*l.*, in 15,000 shares of 5*l.* each; 10*s.* to be paid on application and 10*s.* on allotment. No call to exceed 1*l.* per share, not to be made at intervals of less than two months. Vendor takes the whole of the purchase money at the Imperial Mint in Mexico yielded, according to the prospectus, 11 ounces of silver per ton (100 lbs.), or 248 ozs. to the ton, and 30 grains of gold per ton. Assays of three samples, viz. Mr. Henry Gay, of the Panther Lead Works, Bristol, on the same authority, yielded respectively 66 ozs., 170 ozs., and 324 ozs. of silver per ton. Assays of three samples, from different parts of the mine, made by Messrs. J. & W. Smith, assayers to the Bank of England, are stated in the prospectus to have given the following results:—

No. 1.—Produce of gold	73-000 ozs.	"	"
Produce of silver	1-975 ozs.	"	"
No. 2.—Produce of gold	80-200 ozs.	"	"
Produce of silver	0-975 ozs.	"	"
No. 3.—Produce of gold	373-450 ozs.	"	"
Produce of silver	1-975 ozs.	"	"

The mines are stated to be situated near the town of Irapuato del Oro, in the province of Mexico, and about two days' journey by road from the capital. The above assays

At length Mathew shaft, the easternmost but one in the mine, was selected as the most desirable place from which to direct their future operations. It was admitted of all hands that if success were there met with it could not be the of a most satisfactory character. The eastern good lode was cut into in the 70 fathom level, and soon after in the 80 fm. level. They then commenced sinking Walker's shaft, and proved the lode in the 36, and from there to the 90; and, better still, in the 100. In the last level the ground had been proved for upwards of 30 fms., being worth 40l. per fm., with every prospect of improvement. As regards the estimated value of the ore ground in reserve, he might mention that they did not entirely depend upon the computation of the agents for the mine had been recently inspected by Captain George (the late Lord) Ashurst, Mr. Capt. Dawe, of Great Wheel Vor, for some private individuals, and the lowest estimate made given, by a considerable amount, as to the value of the ground opened was that of their own manager. So that, after such a body of corroborative testimony, there could be no question raised as to the actual value of their reserves. Capt. Mitchell estimated them at 80,000l., while Capt. Dawe put them down at 70,000l. from under the 70, with the ore taken up any notice of what was above. Therefore, he (the Chairman) thought that the shareholders had good reason to be satisfied with the report of the fact that, although they had been somewhat disappointed with the results at the western part, they possessed a really valuable property at the eastern part of their sett. (Clear, hear, hear.) During the past twelve months they had sunk Walker's shaft 100 fms., and had driven levels in a course of tin which had already lasted for some 30 fathoms in length, and when they were in a position to take away the ore from between the 80 and 100 fms. level, they would, according to what their agent stated at the last meeting, be able to open 6000 tons of stuff per month. Calculations could be formed as to the result, and then to be realised if the tin could be proved to be present as far as the 100 fms. level, such an extent, at an expenditure of between 6000l. and 7000l., he thought they would not consider the expenditure excessive, and especially when it was recollecting that during this period such an enormous reserve of tin ground had been laid open. At the last meeting the manager gave them a full description of the mine, when he told them that as soon as Walker's shaft had been sunk to the 100, he would be able to keep 160 tons of stamps continuously at work. Shortly after that meeting the committee took into consideration the possibility of sinking a further shaft, and they decided to sink it at the utmost the present stamps could not reduce more than 2000 tons of stuff per month, while they were likely soon to be called upon to reduce not less than 5000 tons. The committee met Captain Dawe, Captain Mitchell, their own agents, and Mr. Hauband upon the mine, when it was unanimously considered that its position as respects not only justified but positively required that further stamping-power should be at once provided. As the season was rapidly advancing, and time in such a state being a primary object, it was agreed that a new stamping-engine, with 64 heads and 100 stamps, should be erected at Wheel Daniel, by which abundance of water for stamping purposes could at all times be ensured. While upon that point he might mention that, concerning Wheel Daniel itself, there were several favorable reports in circulation, but that was a subject to be considered upon a future day. He thought that for the present the all had good grounds for congratulation that there was before them a prospect of becoming in a position to return 70 tons of tin and probably 6000, worth of copper per month. Indeed, it did not seem too much to hope that they would soon rival some of their best neighbors. (Clear, hear, hear.)

Here, in accordance with the proposition for the reception of the report and the passing and allowing of the accounts, fully endorsed the statements which the Chairmman had made with reference to the favorable position and prospects of the property.

Mr. E. COOKS enquired the expense of the stamps and engine?—The Chairmman

a 13-inch one in its place; when this is done the engine will keep the water by working about $3\frac{1}{4}$ strokes per minute. In the 48 cross-cut the ground continues hard, and our progress is consequently slow; water is issuing very strongly from the end, but this we consider a favourable indication for the lode, and as soon as it is cut we hope to be able to sink a winze on the course of the productive ground in the bottom of the 35.

Mr. William Dent, sen., Chairman of the Thames and Mersey Marine Insurance Company, and Mr. James White, M.P., have joined the direction of the Credit Foncier and Mobilier of England (Limited).

we expect to find the lode in it of a more settled character than it is in the upper level. We have about 4 tons of lead on the mine, besides the rough lead (3½ tons).

EAST ST. JUST UNITED.—J. Carshaw, P. Casley, Oct. 2: We are clearing up and making good Phillips's engine-shaft below the deep adit. The lode in Agnew's shaft, sinking below the adit level, is very kindly, going down in a fine ground; this lode well. The lode in the Crook's shaft, sinking below the 10, is also in the 10 east and west, is just as last reported. We have completed the skip-road to the adit in North Boscoe's shaft, and expect to get the whim to work here next week. No time will be lost in getting the pumps and rods in this shaft so as to clear under the adit level.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennett, Sept. 30: Setting Report: The engine-shaft to sink below the 85, by nine men, at 301. per fm., the lode being the same as last reported. The lode in the 85 west is 18 in. wide, of sugary spar and flookan, with a little ore and tin—a very kindly lode. The 75, east of the cross-course, to four men, at 61. 6s. per fm.; the lode is 18 in. wide, of quartz and pryan, with good stones of yellow ore; this lode is looking very kindly indeed—in fact, it is looking much better than for any preceding period. The 75 cross-cut north, to four men, at 51. 10s. per fm.; here the ground is very heavy, indicating the approach of a lode. The 75 west, to four men, at 61. per fm.; the lode is 18 in. wide, with stones of black ore and tin, looking better than it did. The lode in the slope above the 75 west is worth 25s. per fathom, and set to four men, at 11. 15s. per fm. The winzes sink below the 65, east of the cross-course, to four men, at 41. 10s. per fm.; lode 3 ft. wide, of sugary spar and peach, yielding a little tin and ore, worth 61. per fm. The slope above the 65 west, to four men, at 41s. per fm.; lode worth 91. per fm. The 55 west, to two men, at 41s. 6d. per fathom; lode 2½ ft. wide, worth 81. per fm. The slope below the 55 west, to four men, at 11s. 6d. per fm.; lode worth 161. per fm. The 45 east, by four men, at 51. 10s. per fm.; lode 3 ft. wide, of quartz and pryan, yielding tin, worth 71. per fm. The 35 west, to four men, at 51. 10s. per fm.; lode 3½ ft. wide, and yielding ore and tin, worth 101. per fm. We are of the opinion that the ends in this mine are looking very much improved in appearance.

—G. R. Odgers, W. Bennett, Oct. 4: All the other places in this mine are looking much the same as stated in our report of Saturday last. We are glad to say that we are getting on very satisfactorily with the dressing of copper and tin ores.

EAST WHEAL LOVELL.—R. Quentrell, Oct. 4: The mine, on the whole, has improved during the last week. The turnpike and middle lodes are just as then reported. —South Lode: The 40, driving west, has improved, now worth 501. per fm. The bottom slope above this level is worth 701. per fm., and the top slope is worth 501. per fm. We shall shortly resume sinking on this lode, worth 601. per fm. —North Lode: The shaft is sunk 2 fms. 2 ft. below the 45, in a rich lode, worth 1001. per fm. for 13 ft.

EAST WHEAL TOLGUS.—Oct. 4: Redruth Consols Lode: In the 34, east of John's shaft, the lode is 20 in. wide, consisting of peach, spar, mundle, and blende, and letting out a quantity of water. The ground in the 34 cross-cut south is much the same as when last reported. —Little's Lode: In the adit level, west of the cross-cut, the lode is 18 in. wide, composed of gossan, pryan, spar, and mundle. —Hocking's Lode: In the adit level, west of the lode is apparently getting a little better defined, and one part of it is 17 in. wide, consisting of spar and spots of ore; the eastern end of the ground and lode is in a very distressed state by a slide. The ground in the cross-cut south, in the adit, is moderately easy.

EAST WHEAL VOR.—J. Pollard, Oct. 4: The ground continues much the same for progress in the engine-shaft as reported last week, which is now down 3½ fms. below the 90. In the 70 cross-cut we have not intersected anything worthy of notice yet. In the 80, driving east, we have taken down about 6 ft. of the lode; we find it 4 ft. wide in the present end, yielding rich stones of copper ore and blende, mundle, spar, and peach, and occasionally stones of tin, but at the present appearance it looks more like a copper lode than tin.

FRANK MILLS.—J. P. Nicholas, J. Cornish, R. Andrew, Oct. 4: The engine-shaft, sinking below the 115, is now down 8½ fms., and the ground continues to present the most favourable appearance for the production of lead ore. The lode in the 115 north is assuming a more defined appearance, being now fully 2½ ft. wide, consisting of quartz and white iron, interspersed with spots of lead ore throughout, and a very kindly looking end. In the 100 north the lode has a very promising appearance also, and yielding saving work. The lode in the winze sinking in the bottom of this level is yielding 1½ ton of lead ore per fathom. The lode in the north slope, in the back of this level, is yielding 1½ ton. In the middle slope it is yielding 8 cwt., and the south slope, 12 cwt. of lead ore per fathom. The lode in the 45, east, is yielding 2 cwt. and 1½ tons of lead ore per fathom respectively. There is no other change in any of our workings to notice. The tribute department at present in operation is looking much the same as for some time past, and our progress generally is satisfactory.

FURSDON.—J. Collins, Oct. 4: The shaft is now 9 fathoms 2 ft. below the 21; the ground has a kindly appearance; the branch is standing south of the shaft. The ground in the cross-cut south at the 21 east is dark killas, with much mundle; driven this month 1 ft. 3 in. The tributaries in back of the 21 west are not raising ore so fast, being now employed in taking out a piece of ground to cut into a branch standing inside the workings to make the pitch convenient for working in future. The pitch in back of the 11 ft. level was raised a little improved. The pitch in back of the adit is yielding 1½ ton of ore per fathom.

GARLIDNA UNITED.—J. Rowe, Oct. 3: The burning-house shaft is sunk 8 fms. below the 23 fm. level. The part of the lode on which we are sinking is 3 ft. wide, containing a little tin. There is a part of the lode standing south, which will be cut through when we get at the 33 fm. level. We believe the part standing is the main part of the lode. The ground in the 23 fm. level is improved, and the lode looks more favourable for tin. We are going to open on a lode near the south part of the set. Great East Lovell party are working on one, which is a kindly lode.

GAWTON COPIED.—G. Rowe, Sept. 30: The lode in the 50, east from cross-cut, is still maintaining the very kindly appearance, although at present not quite so valuable for ore, being now worth about 3 tons per fm., with an abundance of mundle, intermixed with friable quartz, lead, &c., altogether a very pretty-looking lode. There is no particular change in any other point of operation. We hope to get ready with our next sampling about the middle part of the coming week.

GLASGOW CARADON.—W. Taylor, Oct. 3: We are making fair progress with the 75 cross-cut south, and have an increase of water there, which I think is from McClure's lode. We have not yet cut the shaft lode in the 65 cross-cut north, but think we are very near it; ground easier, with an increase of water. The lode in the 65 fm. level, has improved, now worth 121. per fm., a fine-looking lode, and I think considerably improved as we get under the course of good ore going down in the winze from the 52. No other change to notice in the different drivings. The slopes, on the whole, are hardly turning out so much ore as last reported. We are busy dressing up ores for sampling, which is on the 9th inst.

GODOLPHIN HILL.—J. Pope, Jun., Oct. 4: Canter Lode: In the deep adit level, driving south-east of Parson's shaft, the lode is 18 in. wide; a very kindly lode, producing low-price tinstuff. In the shallow adit level, driving south-west of Derry shaft, the lode is 15 in. wide, saving work for tin, opening ground that will work on tribute when we have the means of returning the tinstuff on the mine. In the shallow adit level, driving south-east of pump-shaft, the lode is 16 in. wide, producing some good stones of tin, laying open tribute ground; the lode is rather hard just now, which is making the ground spare for driving. Our tributaries are all working very regularly, and I think are getting good wages. The masons have commenced building the new smithy shop, and we are pushing on as fast as possible.

GOLCH HILL.—Oct. 5: The end driving south on the lode at the 84 yard level has altered a little since my last report: the lode is 9 in. wide, composed of spar, clay, driftstones, and lead ore, yielding 6 cwt. per fm. The lode is looking so promising, that I anticipate an improvement every day.

GREAT BRIGAN.—J. Treldinck, Oct. 4: The lode in the end, driving west of new shaft, at the 10, is yielding saving work for copper ore; in the north side of the end we have a branch 6 in. wide, which is making towards the lode, and produces good stones of ore; I anticipate an improvement will take place at the intersection. In No. 1 winze, sinking below the above level, west of said shaft, the lode is at present small. The lode in No. 2 winze, sinking below the said level, is worth for copper ore 51. per fm. The slope in the back of the 10, west of new shaft, is worth for copper ore 51. per fm. The slope in the back of same level, west of No. 2 winze, is worth for copper ore 71. per fm.

GREAT DEVON.—J. Treldinck, Oct. 4: The lode in the 25, east of No. 1 winze, has no change here to notice, other than that the cross-cut north from the 40 west has passed through two or three small branches. All the bargains are carried on with spirit.

GREAT NORTH DOWNS.—J. W. Craze, M. Jenkins, Oct. 4: The ground in Vivian's engine-shaft, sinking below the 67, looks more promising; the lode in bottom of the same yields stones of copper ore. The lode in the 86, driving west of King's shaft, is worth 61. per fathom. During the past week we have sunk Siegan's shaft about 3 ft.; the lode is looking well, and worth 25s. per fathom. The lode in the bottom of the 70, east of Siegan's shaft, is worth 121. per fathom. The lode in the 70, west of the 60, looks more promising, and is producing good stones of copper ore. The lode in the 60, west of this shaft, is worth 101. The ground in the cross-cut south of Highbury shaft, is congenial for the production of copper ore. We think our sampling will show an increase of adventurers' ore on the last.

GREAT RETALLACK.—W. H. Reynolds, Oct. 4: The ground in the adit end continues favourable for driving. The tributaries on blende have broken large piles of stuff, and will now commence dressing.

GREAT SOUTH CHIVERTON.—J. Nancarrow, J. George, Oct. 2: Gifford's engine-shaft is now in full course of sinking, by eight men and four boys, at 71. 10s. per fm.; the ground is a little harder than it was before the adit. The engine works exceedingly well, and we are closing up the house as fast as possible.

GREAT SOUTH TOLGUS.—J. Daw, Oct. 4: In the 140 west, on the tin lode, the lode is 3 ft. wide, worth 101. per fm. for tin. In the 125, east of new shaft, the lode is 2 ft. wide, worth 81. per fathom for tin. In the 125, east of new shaft, the lode is 1 ft. wide, producing 1 ton of copper ore per fathom.

GREAT WHEAL BADDERN.—R. Fryer, H. Tregeoning, Sept. 27: Hill Brothers Engine-shaft: The ground in the 75 cross-cut is becoming more favourable for driving, and the men making fair progress; the end is still in a beautiful vein. The ground in the 65 cross-cut, south of shaft, is without change to notice since our last report, but the end is letting out more water in the 25, east of the 35, east of the 45, east of the 55, east of the 65, east of the 75, east of the 85, east of the 95, east of the 105, east of the 115, east of the 125, east of the 135, east of the 145, east of the 155, east of the 165, east of the 175, east of the 185, east of the 195, east of the 205, east of the 215, east of the 225, east of the 235, east of the 245, east of the 255, east of the 265, east of the 275, east of the 285, east of the 295, east of the 305, east of the 315, east of the 325, east of the 335, east of the 345, east of the 355, east of the 365, east of the 375, east of the 385, east of the 395, east of the 405, east of the 415, east of the 425, east of the 435, east of the 445, east of the 455, east of the 465, east of the 475, east of the 485, east of the 495, east of the 505, east of the 515, east of the 525, east of 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through the lode by four men, 5 ft., or the month, at 151. per fm.; we have cut into the lode 4 ft. and no north wall yet being met with, it is much of the same character as when last reported, producing occasional stones of tin, and water flowing freely therefrom; I believe we have still the main part of the lode to intersect. Gutierrez' shaft no sink by six men, the month, at 91. per fm.

WHEAL AGAR.—Wm. Roberts, Oct. 4: In the 110, east of Windstow shaft, the lode is 2 ft. wide, producing low quality tinstuff. In the winze sinking below the 100, east of shaft, the lode is 1½ ft. wide, composed of spar, mundie, and stones of crs. In the 90 shaft the lode is 3¼ ft. wide, composed of mundie, blende, and good stones of ore.—Western Engine-shaft: In the rise in back of the 100 the lode is 1 ft. wide, yielding good stones of ore. The lode is simply the lode in the winze sinking below the 90 fm. level.

Old Whim-shaft: In the 120 east the lode is 4 ft. wide, producing tinstuff and occasional stones of ore. In the 130 fm. level east the lode is 1 ft. wide, producing good work for tin.

WHEAL CREBOR.—J. Gifford, Oct. 4: In the 108 east we are driving by the side of the lode; ground rather stiff for driving. In the 108 west cross-cutting the lode we are in 6 ft., and so far as it can be seen it is poor. The rise in the 96 west, against the old mine, is up 3¼ fms.; ground favorable. The cross-cut south in the 96, west of shaft, towards the Birch Tor lode, is being pushed on with all speed; ground favorable for driving. In the 82, east of the 84, west of Hook's winze, the lode is 1 ft. wide, at 82. per fathom. The 84 fm. level east is being driven by the side of the lode, which when last taken down was 4 ft. wide, of a promising character, being composed of capel, quartz, and mundie, with occasional stones of copper ore, but not enough to value. No change in the 48 east since last report. The tribute department is looking much the same as last reported.

WHEAL EDWARD.—G. Rowe, Sept. 30: The lode in the 61 west has further improved this week, now worth 1¼ ton of ore per fm., and showing indications of further improvement. The tribute department is also looking better.

WHEAL EMMA.—T. B. Reed, Oct. 5: The lode is intersecting a valuable shoot of ore in the 81 east of shaft, where it falls 4 tons of good ore per fm., and presenting good indications for a continuance. The continued dry weather has somewhat diminished our water, so that we cannot push on the 92. A change of weather would soon supply this want, when we should push on with all speed to get under the ore ground gone down in the 80. We shall have valuable deposits of ore in the 80 and deeper levels, and materially increase our samplings from what is already discovered. The stopes in the bottom of the 70, east of shaft, are yielding 2 tons of good ore per fm. The stopes in the back of the 58 yield 1 ton per fm.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennett, Sept. 30: Setting Report: The 120 west to the 100 east, at 61. per fm.; lode 2½ ft. wide, yielding a little tin, stamping work. The 110 east, to four men, at 71. per fm.; lode 2 ft. wide, of quartz and prisan, yielding a little tin. The 110 west, to four men, at 31. 10s. per fm.; lode 5 ft. wide, and yielding tiny work, worth 101. per fm. Three stopes above this level, to 12 men, at 21. 5s., 21. 5s., and 21. per fm.; lode worth 81. 71., and 61. per fm. The 100 east, to four men, at 81. 10s. per fathom; lode small, but which we think will improve. The winze to sink below this level, by six men, at 121. per fm.; lode worth 121. per fathom. Two stopes above this level, to six men, at 31. 5s. and 21. 10s. per fm.; lode worth 101. per fathom in each. The 100 west, to four men, at 41. 10s. per fm.; lode 2 ft. wide, worth 81. per fm. The 90 east, to four men, at 101. per fm., and set to four men, at 21. 5s. per fm. The 90 east, to two men, at 101. per fm.; lode 2½ ft. wide, worth 81. per fathom. The lode in the stopes above this level is worth 101. per fm., and stoping by four men, at 21. 10s. per fm. The 90 west, to two men, at 31. 10s. per fm.; lode 2 ft. wide, worth 81. per fm. Four stopes above the 80, to 16 men, at 21. 21. 15s., 21. 10s., and 21. 10s. per fm.; lode worth 121. 101. 91., and 81. per fm. The rise above the 66 east, by four men, at 81. per fm.; lode worth 101. per fm. The 66 west, to 100 east, at 101. per fm.; lode small. The stopes above this level, to two men, at 31. per fm., and worth 101. per fm. The winze to sink below the 64, by four men, at 81. per fm.; lode worth 101. per fm. The 64 west, to four men, at 101. per fm.; lode worth 61. per fm. We have to-day set the boundary shaft to sink six men, at 101. per fm.; lode 18 in. wide, of quartz and prisan, a kindly lode; we shall make as much progress with this as possible.

WHEAL GYLLS.—Edward Rogers, Edmund Rogers, Oct. 5: In the 40, driving east of the flat-rad shaft, the lode is small and poor. In the 30, driving east of the pressure shaft, the lode has improved, and is now 4 ft. wide, worth 101. per fm. In the 20, driving east of this shaft, there is no alteration since last reported on; the lode is 18 in. wide, worth 41. per fm. It being our monthly settling-day on Saturday next we will give you a full report on the 10th inst.

WHEAL HARRIET.—S. Williams, Sept. 30: The lode in the 130 west end, from east cross-cut, has improved in appearance, but not to value. The lode in the 115 west end, from east cross-cut, is producing stones of copper ore. The lode in the 115 east end, from west cross-cut, is producing stones of copper ore; I think next week these levels will be communicated. The lode in the stopes above the 115 is worth for copper ore 71. per fm. The lode in the 90 east end is not so large in the bottom of the level, but in the upper part of the level is a lode worth 101. per fm.

WHEAL KITTY (St. Agnes).—Wm. Polkinghorne, S. Davey, Sept. 30: In the 69, driving west of the 60, at 61. per fm., the lode is 1 ft. wide, yielding tin 61. per fm. Fry's Lode: At the new shaft, sinking below the 65, the lode is 7 ft. wide, with every appearance of yielding large quantities of tin in depth, now worth for tin 701. per fm. In the 65, driving west of shaft, the lode is worth for tin 101. per fm. In the 65, driving east of shaft, the lode is producing good stones of tin, but not to value. In the 64, driving west of shaft, we have not seen enough of the lode since last week to give its value. In the 61, driving east of shaft, the lode is worth for tin 81. per fm. In the 44, driving west of shaft, the lode is 1¼ ft. wide, and worth for tin 81. per fm. In the 44, driving east of shaft, the lode is worth for tin 71. per fm. In the adit level, driving west of shaft, the lode is 1 ft. wide, and yielding tin 61. per fm.

WHEAL NORRIS.—J. Andrews, Sept. 30: Carter's shaftmen are engaged clearing away timber, removing ladders, taking out bearers, cisterns, &c., at the 15 and 25 preparatory to sending down the main-rods. In the 67 east we are still driving by the side of the lode, and most likely shall continue to do so until the rise is holed to the 45. The rise in the back of the 67 is up 6 fms. 1 ft., and have nearly 6 fms. further to rise to communicate with the 45, which at the present rate of rising will be accomplished in a fortnight from this time. The lode in the stopes in the back of the 45 has much improved, which is now 2½ ft. wide, worth fully 101. per fm. The new lode in the 45 fm. level end, driving west of shaft, is 18 in. wide, producing good stones of yellow copper ore, and looking very kindly.

WHEAL POLLARD.—W. C. Cook, Oct. 3: During the past week we have met with some flookan holes, by which we intend our near approach to the cross-cores. The character of the ground is still the same for progress as stated in my last report. I have re-set the end at 61. per fm.

WHEAL SITNEY AND CARNMEAL.—W. Chappell, R. Guyas, Oct. 5: The lode in the bottom of flat-rad shaft, sinking below the 125, is disordered from several bad floors of spar, which are passing away in the country, under which we expect a change of ground, and the lode is not making good progress in sinking. The lode in the 95 west end is 3½ feet wide, and producing rich tinstuff for the stamps; here the lode has been regular and well defined for the whole distance driven west of flat-rad shaft, and as we get back west in the same channel of ground as that of Great Wheal Vor and Wheal Metal, the lode is greatly improving for tin; to the west of bonder cross-course, in a deeper level, we may reasonably expect a good course of tin. Bonder shaft is now down to the level of the 95, west of flat-rad shaft, and the shaftmen engaged cutting flat, putting in collar, &c., preparatory to driving east. Our machinery and pitwork are in good working order.

WHEAL TREMAYNE.—R. Williams, J. Williams, Oct. 5: At the new engine-shaft, in the 143 cross-cut north, we have intersected Allen's branch, which is about 2 inches wide, yielding spots of tin, but not to value. In the 133 east Allen's branch is very small, yielding a little low price tinstuff; we think a new branch is making about a little north of the old one. The stopes in bottom of the same level east, on the engine lode, is yielding low price tinstuff. The stopes in the bottom of the 123 east, on Allen's branches, are worth on an average 101. per fm. In the 103 cross-cut north, in search of more branches, there is nothing out to notice. In the cross-cut south of the same level, in search of more branches, the ground is still settling out more water, and indications of our being near the lode. The stopes in back of the same level east, on Allen's branches, are worth on an average 101. per fm. We have four men canteaning in Trenowest estate, where we have found a lode 1 ft. wide, running about east and east, underlying north about 2 ft. in a fathom, composed of gossan, soft spar, prisan, and spots of mundie, showing strong indications of becoming productive at a shallow depth; this lode is running for a great length in unworked ground.

WHEAL UNYEN CONSOLS.—W. H. Reynolds, Oct. 5: The new shaft is now 5¼ fathoms below the 80, and is a good one, of ground for miners. We have floor and level of the shaft containing mud and spots of yellow copper, and in five or six weeks we expect to cut one of the lodes at the 49. The lode referred to was cut at the 30, and is made up of flookan and spar, and prills of lead and copper ore. The shaft is about 120 fms. east of the great cross-course, west of which many thousands pounds worth of copper and tin was raised on this lode from above the 90.

WHEAL UNYEN.—S. Coade, M. Rogers, Sept. 30: We have completed cutting a whim-plat at the 120 fm. level engine-shaft, and shall now fix a new lift at this level, and then resume sinking the shaft by six men and three boys, at 401. per fm. The 120, west of engine-shaft, is sinking by four men, at 101. per fm. The 120, east of the 120, west of engine-shaft, are employed in raising a winze by four men, at 41. per fm. The winze sinking below the 110, east of engine-shaft, is sinking by four men, at 71. per fm. The winze sinking below the 110, west of engine-shaft, is sinking by four men, at 71. per fm. The 110, east of engine-shaft, is driving by four men, at 161. per fm. The men in the 100, east of engine-shaft, are employed in raising a winze to communicate with the winze sinking below the 80, by four men, at 51. per fm. The incline shaft is sinking by six men, at 101. per fm. The 120, west of incline shaft, is driving by four men, at 81. 10s. per fathom. The 100, west of incline shaft, is driving by two men, at 71. per fm. The 100, east of incline shaft, is driving by two men, at 71. per fathom. Gooding's shaft is sinking by four men, at 71. per fm.

A FEAT IN BOILER-MAKING AT HARTLEPOOL.—The screw steamer *Wearmouth*, the property of the owners of Usworth Colliery (a firm, the principal members of which, we believe, are Mr. Elliott, Houghton-le-Spring, of Transatlantic cable fame, and Mr. Jonasohn, of Sunderland), is being fitted up with new boilers, just now—"under high-pressure," at least as to the speed with which they have been constructed. The result has been one of the most expeditious piece of boiler-making we have heard of in the district. Within 16 days from the boiler plates being put into the hands of a batch of efficient workmen, under the superintendence of Mr. George Duncan, an experienced boiler-maker at Hartlepool, the boiler was completed, and completed with 45 lbs. to the square inch water pressure, and again with 25 lbs. steam distill, and declared perfect. Persons who know anything of boiler-making, or who have observed the labour incident to building a boiler 13 ft. 4 in., by 13 ft.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, OCT. 6, 1885.

COPPER.	£ s. d.	BRASS.	Per lb.
Best selected, p. ton	89 0 0	Sheets	84d.-9d.
Tough oak & tile	86 0 0-88 0 0	Wire	84d.-9d.
Burma Burma	91 0 0-92 0 0	Tubs	94d.-9d.
Copper wire	11 1/2		
Sheeting & boiler plate	91 0 0		
Bottoms	96 0 0		
Old (Exchange)	77 0 0		
		STEEL.	Per Ton.
		Swedish, in kegs (rolled)	13 0 0-14 0 0
		" (hammered)	15 0 0-16 0 0
		Ditto in fagots	16 0 0-17 0 0
		English, Spring	18 0 0-23 0 0
		QUICKSILVER (per bottle)	8 0 0 nom.
		SPALTER.	Per Ton.
		Foreign	21 0 0
		To arrive	21 0 0
		IRON.	Per Ton.
		Bars Welsh, in London	7 12 6-8 0 0
		Ditto, to arrive	7 15 0
		Nail rods	8 10 0
		" Stafford, in London	8 10 0-9 15 0
		Bars ditto	8 12 6-11 0 0
		Hoops ditto	9 15 0-10 10 0
		Sheets, single	10 10 0-11 0 0
		Fig. No. 1, in Wales	4 10 0-5 10 0
		Refined metal, ditto	4 0 0-5 0 0
		Bars, common, ditto	7 0 0-7 5 0
		Do. merch. Tynes & Co.	10 0 0
		Ditto, railway, in Wales	7 0 0-7 5 0
		Ditto Swed. in London	11 0 0-11 10 0
		To arrive	11 10 0
		Fig. No. 1, in Clyde	2 18 6-3 7 0
		Ditto, No. 1, Tyne or Tees	2 9 6
		Ditto, No. 3, 4, f.o.b. do.	2 6 6-2 5 6
		Railway chairs	5 10 0-5 15 0
		" spikes	11 0 0-12 0 0
		LEAD.	
		English Pig, ordy. soft	19 15 0
		Ditto (WB)	20 15 0-21 0 0
		Ditto sheet	20 10 0
		Ditto rod lead	22 0 0-23 0 0
		Ditto white	26 0 0-27 0 0
		Ditto patent shot	23 0 0
		Spanish	19 0 0

† By a typographical error, we quoted English pig, ordinary soft, 20t. 10s. instead of 19t. 10s. In last week's Journal. The "Remarks," however, stated correctly that a rise of 5s. (from the previous price of 19t. 5s.) had taken place.

REMARKS.—Notwithstanding the rapid increase in the Bank rate of discount, there has been a good market for metals, and, although speculation may to some extent be checked for a time, yet the legitimate business seems unlikely to be affected.

COPPER.—During the past few days, has been sold freely, especially unwrought, most of the smelters declining to sell any further quantity of tough at fixed rates. Higher prices have also been paid for foreign kinds, and holders are very firm at the enhanced quotations.

IN YELLOW METAL there is some enquiry, the value of which shows an upward tendency.

IRON.—Ironmasters are fairly supplied with orders, and rather disinclined to book any further quantity, unless at higher rates. The market for rails is good, and some of the makers full for a long time to come. Merchant bars occupy a better position, and prices are well maintained. Staffordshire makes continue in moderate request. Swedish bars are dull of sale, and exhibit no change for the better. Scotch pigs slightly receded, in consequence of the increased rate of the Bank, and 57s. 6d. has been accepted for mixed numbers in Glasgow.

LEAD.—The demand for America has caused a run upon the stocks in London, and both English and foreign have undergone an improvement. Spanish pig, soft quality, commands 19t.

SPALTER.—A pressure of sales has influenced prices to the extent of about 15s. to 20s. per ton, 20t. 15s. being reported for out ports. The stock in London, compared with the previous month, shows a diminution of about 600 tons.

TIN.—English is quoted the same as last. Straits now realise 91t. to 92t. Shipments to New York are unusually large. Banca is in demand at proportionate prices.

TIN-PLATE.—It is still difficult to contract for speedy deliveries, unless in small quantities, and at high prices.

STEEL.—Swedish attracts but little attention, and may be still brought at former quotations. QUICKSILVER, unchanged.

THE LIVERPOOL METAL MARKET—OCT. 5.

FIG-IRON.—The late advance in the rate of discount has somewhat discouraged speculation, and pulled prices a trifle down. Some little business has been done at 57s. 3d. to 57s. 6d., closing prices to-day.

MANUFACTURED IRON continues to improve in almost all its branches. The very hot and dry weather we have had all last month diminishing greatly the supply, combined with a very much better trade with the States and India, has caused makers to be stiffer in price; indeed, North Staffordshire houses are asking 5s. per ton advance, and are shy at large orders even at this. Welsh makers are well off for orders. The only branch of the iron trade really dull is the shipbuilding trade, which shows no immediate sign of improvement, consequently telling unfavourably on makers of plates and angle iron. Prices may be quoted, f.o.b. in Liverpool, as follows:—Welsh bars, 7t. 10s. (in Wales, 7t.); common Staffordshire bars, 7t. 15s.; best bars, 8t. 5s. to 9t.; hoops, 9t.; sheets, 10t.; nail rods, 8t. to 8t. 10s.

TIN-PLATES continue in great request, the demand for the American market is beyond all supply, makers are full of orders, and we may confidently look for much higher prices. Cokes, 23s. 6d. to 25s.; charcoal, 28s. to 31s., f.o.b.

TIN.—English much firmer. Smelters will not sell a penny under list prices. Large transactions in Straits are reported from London, but market rather quiet here, at 93s. to arrive.

COPPER is in decidedly better demand, and orders given out more freely. We may expect an improvement in price shortly.

LEAD has improved slightly. SPALTER remains inactive.

WOLVERHAMPTON, OCT. 6.—Griffiths's bi-weekly report says—"The Iron Trade progressed steadily during the whole of the month of Sept., and orders for hoops and thin sheets continued to increase as the month advanced. We have had a heavy business in pig-iron during the month, and the prices of the best native brands may be quoted at 2s. 6d. per ton advance over the figures obtained at the July quarter-day."

THE SCOTCH FIG-IRON TRADE.—In their review of the trade during the first nine months of the year, Messrs. J. E. Swan and Brothers, under date Glasgow, Sept. 30, state that the total stock at date was—in the hands of the makers and at outports, 208,771 tons; in Connal's stores, 334,378 tons; in Forth and Clyde stores, 20,440; in Ardrossan stores, 16,516 (total stock, 369,225 tons) = 270,000, which, compared with the estimate for Dec. 31 last, shows a decrease of stock of 90,000 tons. The deliveries from store have been this year—January, 171,101 tons; February, 54,700; March, 10,238; April, 46,561; May, 13,776; June, 27,730; July, 52,838; August, 49,119; September, 744 = 371,011 tons. Precise returns have been obtained from all makers except the Carron Company. The production remains about uniform, but the number of furnaces in blast has been less than in the corresponding period of last year. Ironstone and coal are largely required for, and it is evident that the cost of the raw material is likely to rise higher. The local consumption maintains its position, and there has been more activity in the various malleable ironworks throughout the country. Shipbuilding evinces some symptoms of revival. Moderate freight, coupled with facilities for steam navigation, have augmented shipments, which now show an increase of 34,404 tons, compared with 1884. The deliveries by rail to England are very satisfactory, and arrangements for through rates to all parts of the kingdom are being steadily organised. There has again been a continuous exodus from store, caused by the scarcity of several brands, and also by the high prices asked by some of our principal makers. This movement has constituted one of the most remarkable features in the trade, the decrease since the close of last year being 37,101 tons, and from the commencement of the withdrawals in November last, 41,014 tons. This has also affected the parcels stored at Ardrossan; and as shippers are averse to paying rent upon these warrants, it is probable the 16,516 tons there will, ere long, disappear, so that the idea lately suggested of a similar store at Greenock is likely to remain in abeyance. The labour question is again attracting public attention, as the colliers and miners are persistent in their demands for a further advance in their wages, being well aware of the healthy position of both the iron and coal trades, also of the scarcity of men, and the unusual advantages offered by emigration. A marked revival of demand from America has just sprung up, which is all the more satisfactory, as it has arisen despite the very serious import duties on the other side; and were these modified, and tonnage more plentiful, a large trade would certainly be developed with the return of that elastic country to its normal state of prosperity; as it is, shippers are encouraged by very remunerative proceeds on consignments made under existing disadvantages. The imports of Cleveland brands have, during this year, been very much restricted, on account of the relative position of the two markets, and also by the inability of the makers in the North of England to give prompt delivery, their stocks having decreased simultaneously with ours.

NEW YORK, SEPT. 21.—The iron manufacturers are more busy now than for two or three years, and many of the mills have orders to occupy them for four months. They are refusing orders, except to be filled at prices ruling on their execution. A very similar condition of affairs exists in the manufacture of pig-iron, and the high prices reached are fully sustained. Scotch pig-iron continues scarce; 500 tons, No. 1 Glenageary, to arrive here, sold at 34s., and small lots from yard bring from 34s. to 35s. Trade in English bars is very active from store. The stocks are small, and running low. Nails are quoted at 7c., and the leading brands are very scarce—many of them out of market. The manufacturers are giving

their whole attention to cast nails, making efforts to fill their orders.—STEEL: The Eastern steel manufacturers are doing very little, but we believe there is a better demand in Pittsburgh. English steel is in good demand. The sales to the oil country have fallen off considerably, but the regular trade is unusually good.—COPPER: We advance our quotation of American ingot, making it now 31 1/2 c. to 32 c. per lb., according to the brand and quality. Baltimore is selling at 31 1/2 to 31 3/4. Portage, 32 1/2 c., and Detroit, 32 3/4 c. to 33 c. The stocks are very light, and not increasing, and the prices above given are very firm. The sales are from 200,000 to 300,000 lbs.—LEAD: The other metals are very dull, and small supply. The demand from stock is active. Sales have been made to the extent of about 300 tons. Bar remains 11 c., and sheet and pipe 15 c. cash.—The Iron Age.

THE TIN TRADE—ITS STATE AND PROSPECTS.—As we anticipated in our last Circular, a very large amount of business has been done during the past month; the requirements for home consumption have been very satisfactory, and the purchases for shipment to America cannot be estimated at less than from 500 to 600 tons. While these purchases were going on, the market could not be roused from its long-depressed condition, and holders vied with each other in supplying the daily requirements at the current value. This state of affairs continued during the first three weeks of the past month; but during the last ten days available tin began to get scarce, and holders asked higher prices. The demand still continuing, operators began to buy for investment, and, speculation having once set in, a most animated business has taken place at gradually advancing prices, and we have to report a recovery of fully 5t. per ton from the lowest prices touched during the month of September. At no time during the past two years has an advance been more justified than at present. The stock in the United States was almost exhausted, so that we may expect a steady demand for some time to come from that quarter, the more so as our market at present is the cheapest source from which they can supply themselves. The stocks in France must be very small, it being well known that but little tin has found its way there during the last six weeks; besides, attempts have already been made to buy in this market, so we expect that they must pay current rates are long; added to this, the tin-plate trade is very active, and likely to continue so, so that the home consumption must be large for some time to come. The deliveries from stock during September must be estimated at fully 600 tons, for, in spite of an arrival during September of upwards of 10,000 slabs, Banca and Straits combined, and about 250 tons arrived but not landed in August, our stocks on Oct. 1 show a reduction of 268 tons, compared with Sept. 1. There is nothing of particular importance to report from other quarters. In Holland the market has been very dull during the great portion of the month; but, stimulated by better advice from here a gradual advance has taken place, until during the last few days the market has become excited, and an advance of about 5t. per ton has been established. The deliveries have been of no importance, which must be attributed to the unwillingness of holders to sell Banca at a proportionate price to Straits. From Penang and Singapore the latest accounts report prices on a par with those ruling here, and not much tin in stock ready for shipment; but the quantity shipped during the last three months has been enormous. The prospects of those interested in tin, be they miners, smelters, importers, dealers, or consumers, are more favourable now than they have been for a long time past. We have at last made an inroad into stock, and business is now healthy; but it is to be hoped that the advance so long wished for will not be pushed up too rapidly, for the more gradual it is, the more likely is the improvement to be permanent. Having thus stated the favourable side, we must not ignore the fact that the combined stock of London and Holland is still very large, and the quantity afloat also considerable—in fact, far beyond what any ordinary consumption would absorb. The quantity of tin here and in Holland on Sept. 30 was as follows, compared with the three preceding years:—

	1865.	1864.	1863.	1862.
Slabs, Tons.	132,169	123,000	123,000	123,000
Stock in Holland	45,788	58,998	58,998	58,998
Arrived for next sale	45,788	58,998	58,998	58,998
Stock here	3142	3666	3666	3666

Total tons 8932 7636 6850 5750
The quantity of tin now afloat for England is 1738 tons, against 895 tons last year; and to the Continent 17 tons. The arrivals of tin in London during September have been—Straits, 7824 slabs; Banca from Holland, 2380 to 10,174 slabs. We estimate the present stock in warehouse here at 2142 tons. The export of tin from Singapore, from July 20 to Aug. 20, was—to Great Britain, 13,252 pekils; Continental Europe, 59; America, nil; price 82 1/2. From Penang during the same period—to Great Britain, 1599 pekils; Continental Europe, nil; America, 502; price 82 1/2.—VON DADELSEN AND NORTH.

THE TIN TRADE.—Mr. L. Th. van Houten, under date Rotterdam, Sept. 30, writes:—"In the beginning of the present month the tin market was quiet; but during the last days the demand was generally very active, and an important advance in the price has taken place. The advances from abroad are of a much more encouraging character, and there is a greater disposition to enter into operations. Altogether, there is every reason to expect that within a short period tin will participate in the increasing activity which now prevails in almost every branch of trade. In Banca tin, at the commencement of the month, small lots changed hands at 54 1/2 s. to 54 3/4 s.; but gradually the market gained in strength, and in the course of this week considerable quantities have been purchased for export and investment at 54 1/2 s. to 55 1/2 s. To-day the market closes strong, with an upward tendency, there being buyers at 55 1/2 s. For Billiton tin there is a good enquiry at 55 1/2 s.; yesterday 1100 slabs were sold on private terms. The 2000 pekils offered in public sale at Batavia on Aug. 7 fetched the average price of 57 5/8 s., equal to about 56 s. delivered here. The official returns published by the Dutch Trading Company show—

	1865.	1864.	1863.	1862.
Stock second-hand (on warrants)	132,169	123,000	123,000	123,000
Unsold stock	45,788	58,998	58,998	58,998
Total stock	180,957	181,998	181,998	181,998

Quotation, Sept. 30, 56 1/2 s. 61 s. 74 s.
The returns of 1865, compared with those of 1864, exhibit—A decrease of the import for September of 15,234 slabs, equal to 489 tons, and an increase for the nine months of 5137 slabs, equal to 162 tons; a decrease of the deliveries for September of 4500 slabs, or 142 tons; and for the nine months of 34,067 slabs, equal to 1073 tons; an increase of the stock second-hand of 47,219 slabs, equal to 1487 tons; an increase of the unsold stock of 9792 slabs, equal to 308 tons; an increase of the total stock of 57,011 slabs, equal to 1796 tons; and a decline in the quotation of 4 1/2 s., equal to 7t. 10s. per ton. The Government returns for the months of July are as follows:—

	1865.	1864.	1863.	1862.
Germany	270	311	877	943
Belgium	119	94	279	282
England	89	102	183	280
France	189	224	467	520
Hamburg	47	49	99	93
America	32	3	58	31
Other countries	98	86	194	78
Total	844	819	2157	2217

According to the official returns the import of tin for consumption in France has been—

	1865.	1864.	1863.	1862.	1861.
England	119	132	108	1385	1260
Belgium	18	2	1	117	118
Holland	217	178	132	518	658
Other countries	48	6	16	396	368
Total	384	331	258	2329	2403

THE COPPER TRADE.—Mr. J. Pittcairn-Campbell, of Liverpool, reports—After the dispatch of the last mail the market became much quieter, and speculators in bars appearing as sellers, prices were reduced to 77t. 10s.; we, however, close with more firmness at 77t. 10s. to 78t. per ton. The demand for English copper continues fair, without being active. Sales since my last have been—

Sept. 15.—25 tons Urmeneta ingots, ex "Tinto"	£84 0 0 per ton.
" 19.—25 tons Urmeneta ingots, ex "Tinto"	84 0 0 "
" 19.—100 tons bars, ex "Santa Rosa"	77 10 0 "
" 21.—80 tons bars, ex "Santa Rosa"	77 10 0 "
" 23.—30 tons Urmeneta ingots, ex "Tinto"	84 0 0 "

Stocks in first and second hands likely to be available are—

	Regulus.	Bars and ingots.	Barilla.
Liverpool	2346	3940	5542
Swansea	4025	3458	1233
Arrivals from the West Coast of S.A. during the past fortnight have been as follows:—			
"Alles," Coquimbo, 413 tons regulus, 48 tons bars, and 45 tons ingots. Quotations are 15s. 3d. for ore and regulus, 77t. 10s. to 78t. for bars, 84t. for ingots, and 16s. to 16s. 3d. for barilla.			

The market has improved 40s. to 50s. per ton during the past fortnight, and closes firmly at 90t. to 90t. 10s. cash for Straits.

THE MINING SHARE MARKET opened very buoyantly this week, and several shares advanced in price, but the sudden and rather unexpected rise in the rate of discount put a stop to speculation for a time, and a general decline in prices took place on Tuesday and Wednesday. On Thursday there was a slight recovery, and on Friday an active business again commenced, aided considerably by a rise of 3t. per ton on tin ore, and of 2 1/2 on the standard for copper. One of the causes of a rise of 1 1/2 per cent. in the value of money, in the course of a week, is said to be the enormous amount of speculation in cotton, which has been going on for some time at Liverpool, and the consequent demand for discount on the Northern banks, which, in their turn, have to apply to London. A revival of trade with America, to a very large extent, may also have contributed in a still greater degree to the rise, and this we look upon as a favourable feature for the mining interest, which, with increased demand for metals, will go on improving, whatever the rate of discount may be. Chiverton Moor shares advanced to 7 1/2, then receded to 6 1/2, and leave off 7 to 7 1/4; Clifford Amalgamated shares keep firm, owing, it is supposed, to a heavy "bear" account, and they leave off 19 to 20; Carn Camborne, 35s. to 37s. 6d., and the mine further improved; Cook's Kitchen shares advanced on Friday to 8 1/2; East Basset, 25 to 26; East Carn Brea, 5 1/2 to 5 1/4. Wheel Basset, 75 to 80; at the meeting, held on Tuesday, the accounts showed a profit on two months of 753t. 15s. 5d., and a dividend of 1t. 10s. per share (768t.) was declared, leaving 1149t. 0s. 7d. in hand. In the 80 fm. level cross-cut, north of Giesler's, Paddon's lode has not yet been intersected. On the whole, the prospects are described as cheering. South Basset, 4 to 4 1/4; at the meeting a call of 1t. per share was made. In the 40 east Teague's lode is 4 ft. wide, spotted with copper ore; this lode has very much improved in size and appearance since it left the cross-course; and the agent hopes the time is not far distant when he will be able to give

a more favourable report. The situation of this mine is so good that a discovery would cause a good rise.

East Gannalske, 15s. to 20s., and enquired for. East Lovell, 15t. to 16t.; East Russell, 3 to 3 1/4. Wheel Baller, 25 to 28; the ends, in the old Buller lode operations have been commenced, and producing good tin floors progressing. East Wheel Grenville shares advanced to 3 1/2, then, without any change in the mine, they declined to 2 1/2, 2 1/4, and 2 1/2, 3, and in demand, and rising. Frank Mills, 6 1/2 to 6 3/4. Connors. It is expected Gilpin's lode will be cut in the 114 cross-cut south below next meeting. Grambler and St. Aubyn, 2 1/2 to 3 1/4; this mine looks promising, and shares may rise. Great Laxey, 20 1/2 to 21; Great Wheel Vor, 34 1/2 to 35 1/2; Herodfoot, 38 to 40; Lady Bertha, 11s. to 13s.; North Basset, 16s. to 18s.; North Roskear, 10 to 11; North Shepherds, 4 1/2 to 5 1/2; South to 36; Rosewarne United, 17s. 6d. to 22s. 6d.; South Condurrow, 14 1/2 to 15; West Caradon, 9 to 9 1/4; West Chiverton, 70 to 75. Wheel Chiverton shares rose to 12 1/2, 138, and then declined, owing to the state of the ends on the counter lode are worth 28t. per fm.; the new lode, 12t. per fm. The Wheel Grenville shares advanced to 3 1/2, then declined to 2 1/2, and leave off 2 1/2 to 3. Wheel Rose, 2 1/2 to 2 1/4; Wheel Trelawny, 15s. to 16s. per share was made, but we have not received the official report of the Wheal Crebor, 30s. to 32s. 6d.; Prince of Wales, 1s. 6d. to 2s. 6d.; a good 1 1/2; it will be remembered that a very rich lode was cut here 14 fathoms deep; it was 5 to 6 ft. wide, yielding several tons of copper ore; but, owing to an increase of water, the shaft was suspended, and an adit taken up to cut the same lode 25 fms. deep; and Capt. Rowe, of Wheal Seton, at the time this was commenced, described it, after his inspection, as one of the most promising young mines he had ever met with. This week Captain Rowe, who has inspected the mine, reports that two branches of copper ore have been met with in the adit cross-cut, and the lode is not far off. He adds—"My opinion is, when the lode is cut something good will be found, for I never saw better ore in my life than what is cut in the branches." We have frequently called attention to the merits of this speculation. North Trekerby shares rose on Monday to 3 1/2, 3 1/4, then declined to 2 1/2, rose on Friday to 3 1/2, 3 1/4, and leave off 3 1/2 to 3 1/4. From a special report we learn that that the 110 has gone over 24 fms. of ore ground, worth from 10t. to 55t. per fathom. The present end is worth from 50t. to 60t. per fathom, and from its present character shows evidence of continuance. The 100 fm. level is worth 25t. per fm.; the winze below the 90, in advance of the 100, is worth 30t. per fm., in ore of better quality; the winze below the 77, 6 fms. in advance of the 90, is worth 3 tons per fm., and the reserves daily increasing. East Rosewarne, 2; at the meeting, held on Wednesday, the accounts showed a balance in favour of the mine of 908t. 9s. 6d. to end of July, and a dividend of 2s. per share was declared. The agent purposes pushing on the present operations with about the same number of hands at a little less cost, and hopes to make further discoveries that will lead to good results. Cashwell, 1 to 2; this mine, on the same lode as Cross Fell, that left large profits, is said to be looking well, and yielding monthly profits.

On the Stock Exchange the transactions effected in Mining Shares during the week have been numerous, and generally with better prices. The following quotations were officially recorded in British Mining Shares:—Chiverton, 13, 13 1/2, 10 1/2, 11, 10 1/2, 11; East Basset, 25; East Carn Brea, 5 1/2, 5 1/4, 6; Great Laxey, 20 1/2, 20; Devon Great Consols, 56 1/2, 56 1/4; East Caradon, 11 1/2; East Lovell, 16; Great Wheel Vor, 34 1/2, 34 1/4, 35; Wheal Seton, 19 1/2, 20, 19 1/2; West Seton, 16 1/2; South Condurrow, 14 1/2, 14; Great South Tolgus, 1 1/2, 1 1/4; North Wheel Croft, 1 1/2; Clifford, 19 1/2; Herodfoot, 39 1/2; Stray Park, 11.—In Colonial Mining Shares the prices were:—Yudnamutana, 1 1/2; Australian, 1 1/2; Kapuni, 1.—In Foreign Mining Shares the prices were:—Alamillos, 1 1/2, 1 1/4; Frontino and Bolivia, 5 1/2, 5, 4 1/2, 3 1/2, 4 1/2; United Mexico, 3 1/2, 3 1/4, 4 1/2, 4 1/2, 3 1/2; Washoe, 6 1/2, 6 1/4; North del Rey, 3 1/2; East del Rey, 1 1/2, 1 1/4; Linares, 3; Montes Aures, 3; St. John del Rey, 39, 40, 41, 40, 41; Cobre, 20, 21, 20; Fortuna, 3 1/2.

IRISH MINING SHARE MARKET.—The preference for mining shares which we noticed last week as having been accorded to them over nearly all other securities continued into the early part of this week, but in consequence of the, although not unexpected, rise in the Bank of England rate of discount from 4 1/2 to 5 per cent., which took place on Monday last, business in shares of all descriptions was injuriously affected. The further advance, on Thursday, of the Bank rate to 6 per cent. has, for the moment, disordered quotations to such an extent that it will take some days to allow the comparative surprise to work itself off, when, no doubt, the soundness of the policy of this last financial measure will be better understood, and speculative transactions will again be regulated more in accordance with the intrinsic value of the respective securities, instead of to the difference in the value of money, which, though amounting only to 1 or 2 per cent. per annum, is wonderfully magnified by the imaginations of monied operators for time. We may, therefore, expect that none but the most timid or the absolutely needy will press their share-property into a temporarily disordered market, where, however, they would be sure to meet with buyers ever ready to pick up bargains for better times to come, as, after all, the proportion of supply to demand is the true ruler of the price of any commodity. We need apprehend no particular depression in mining shares if holders will only take quiet counsel with themselves, and make no rash for immediate sale of their *dona fide* interests in such mines as always find purchasers. Wicklow Copper Mining Company's shares were remarkably firm throughout, at last week's highest rate, or 15t. 1/2, share, 2t. 10s. paid, and have made a steady advance from that 15t. 1/2, and finally to 15t. 10s. for cash, while for January account 16t. 3s. we readily obtained. For the reasons above referred to, the demand is lessened, but holders decline to lower their figures. Mining Company of Ireland shares were not so steady, and prices gave way in consequence, both for cash and time, although in the beginning of the week there was an appearance of firmness, with a slight advance on last week's closing prices. After some fluctuations, and a blank day on Wednesday last, they may now be quoted as feebly supporting the price of 19t. for cash, and 19t. 1/2 to 20t. for January account (7t. paid). Connors shares (20s. paid) command frequent enquiries, and have been well sustained at last week's advance to 22s. 6d. for cash. For February account they have been done at 23s. 6d., closing buyers for both. Other mines have been neglected this week.

THE TASSO-BRAZILIAN GOLD COMPANY, with a capital of 200,000t., in shares of 5t. each, has issued its prospectus. As indicated by the title, the object of this enterprise is to acquire the territorial possessions of Signor José Jacomo Tasso, which is situated in the centre of the gold districts of Parahyba, and to undertake the work of gold mining in North Brazil, "upon a scale (to use the words of the prospectus), and with such approved machinery as shall render the enterprise one of immediate and great productivity." Upon the estate in question there have been already discovered covered light gold-bearing lodes; but in addition to the development of these lodes, it is proposed to exercise the right held by Signor Tasso from the Brazilian Government of exploring and pre-emption within the provinces of Parahyba and Pernambuco. Numerous assays have been made, of the chief of which yielded an average of 1 oz. 9 dwts. 23 grs. per ton of the ore, and five samples obtained from different parts of the Bon Esperanza lode, yielded 2 ozs. 9 dwts. 15 grs. of gold per ton. The above assays were made by Mr. William Roay and Mr. Thomas Andrew; but others were made from ore more recently extracted from the lode which

ARTICULARS OF COPPER ORES SOLD IN CORNWALL IN THE QUARTER
ENDING SEPTEMBER 30, 1865.

Copper ores, 38,704 tons (21 cwts.)—Fine copper, 2372 tons 13 cwts.—Amount of
ore, 167,916l. 15s. 6d.—Average produce, 6½%.—Average standard, 115l. 12s.—Ave-
rage price (per 21 cwts.), 4l. 7s.

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past few years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Industry, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are almost daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

LEAWOOD.—Much disappointment has been expressed in reference to this concern; but we are now informed there are splendid branches of rich copper ore crossing the end, in a beautiful channel of ground, and the lode expected to be cut very shortly.

NEW INVENTIONS.

PROVISIONAL PROTECTION for six months has been granted for the following:—
J. GRANT, of Oullins, Department of the Rhone, France.—Improvements in treating, working, or manipulating cast-steel, for the manufacture of wheel-tyres, armour-plates, or other articles requiring great hardness and tensile strength. Sept. 5.

W. UNWIN, Sheffield, York.—Improvements in the manufacture of iron. Sept. 9.

A. V. NEWTON, Office for Patents, 66, Chancery-lane, London.—Improved machinery for cutting stone. Sept. 15.

ED. A. COWPER, 35A, Great George-street, Westminster, and C. W. SEIMER, 3, Great George-street.—Improvements in apparatus for separating dust from the gases evolved from blast-furnaces for smelting iron. Sept. 19.

LETTERS PATENT have been issued for the following:—
N. N. SOLLY, Moseley Hall, near Wolverhampton, Stafford.—Improvements in water-tuyers for blast-furnaces. March 15.

H. SIMON, Manchester, Lancashire.—New or improved apparatus for separating or sorting and washing ores, minerals, coal, emery, and other substances in a granular or pulverulent state. April 5.

W. ED. NEWTON, Office for Patents, 66, Chancery-lane.—Improvements in steam-lift of SPECIFICATIONS published during the week:—
Extracting silver from lead, &c.; compressing gunpowder for blasting, &c., &c.; casting metals, 104.

TRUSTEES' LIABILITY.—In *re* Ellis, before the London Court of Bankruptcy, a deed of assignment for the benefit of creditors had been executed, and many personal and written applications to the trustee for information respecting the trust estate had been made. The trustee had disregarded such applications, and several summonses had been issued for his attendance, and ultimately his arrest had been effected. The Court ordered him to pay the costs of the proceedings; observing that trustees for creditors should understand that it was their duty, upon the reasonable applications of creditors, to give full information with regard to their receipts and payments.

LIABILITY FOR SMELTING WORKS NUISANCE.—In the case of Tipping v. the St. Helen's Smelting Company (Limited), which was an action for injury done to the plaintiff's land, including his trees, shrubs, &c., by the company's smelting works, it was held by the House of Lords, at one of its last judicial sittings (affirming the judgment of the Court of Exchequer Chamber), that the plaintiff had the right of action, and that it was no defence for the defendants (the smelting company) to show that the locality abounded in similar manufactures, or that the company's business was carried on in a proper manner.

PREFERENTIAL SHARES.—It has been decided, by Vice-Chancellor Kindersley, that preferential shares cannot be issued by a company formed without an express condition to that effect. The directors cannot do it; a general meeting cannot do it. In the case of Hutton v. the Scarborough Cliff Hotel Company, it was proposed to be done by another device. A meeting was called in regular course to alter the Articles of Association, so as to permit of preferential shares, and a resolution to that effect was carried. But some dissentient shareholders obtained an injunction to prevent the company from carrying out the design, the Court holding that it was beyond the power of the meeting to pass such a resolution, the proposition being, in fact, for an alteration in the constitution of the company, it being an inherent stipulation on the formation of a joint-stock company, in the absence of any provision to the contrary, that all the shareholders should stand on an equal footing. "This series of decisions (says the *Law Times*) must affect a vast number of companies, who have been largely issuing preferential shares, in entire ignorance of their illegality. Such shares will probably be held to be void. The holders of them and their solicitors should look to this at once."

THE GEOLOGICAL MAGAZINE for October is one of the most interesting numbers which has yet appeared, though still somewhat too technical to secure it so large a class of readers as it would otherwise obtain. That an enormous amount of information is compressed into a very limited space must be admitted; but it certainly appears that, without much additional trouble, the notices of memoirs, reviews, &c., could be made to read so much less like authors' notes as to enlist the interest of those indirectly, as well as those immediately, connected with geology. The present number has half-a-dozen really valuable and practical communications from correspondents, and as these increase the magazine will, doubtless, attain that position in the scientific world to which the names of the editors should entitle it.

QUARTERLY JOURNAL OF SCIENCE.—The October number of this Journal contains six original articles. The first is by Capt. Tyler, and considering the position of the author, the reader is likely to be much disappointed. Had Capt. Tyler ever seen the most approved forms of second-class carriage running on the Hampstead and Kew line, he would have learnt that it is not impossible to secure communication of the most effective character without adopting the absurd American model, and without losing the advantages of the "numerous doorways parallel to the platform, as in the ordinary English carriages"—the paper is a compilation chiefly from our own books and from various French sources—the latter, which contains the more interesting information of the two classes of extracts being given in the original French to save trouble. Dr. Aguirre contributes a paper on the Quality of Musical Sounds; Dr. Seisler, on the Mammals of South Africa; Mr. H. M. Jenkins, on Strata Identified by Organic Remains; the Rev. C. W. Kelt on the North Pole; and Mr. Robert Hunt, on British Gold. The *Chronicles of Science, Reviews, and Notes and Correspondence* are of the usual interesting and attractive character.

POPULAR SCIENCE REVIEW.—The original papers in the October part of this quarterly are fully worthy of the periodical in which they appear, combining as they do sound scientific information, with a thoroughly popular style; they are eight in number, and comprise articles—On Atlantic Telegraphy, by Mr. Robert Hunt; On Pure Water, by Dr. Edwin Lankester; On the Nature and Diagnostic Value of Raphides and other Plant Crystals, by Mr. George Guiliery; On Lake Basins, by Prof. Ansted; On Epidemics, Past and Present (a highly interesting paper); On the Microscopic Anatomy of an insect larva—*Cerebra phormicorum*, by Mr. E. Ray Lankester; On the Moon, by Mr. James Breen; and On Photography, and some of its applications, by the Editor. The *Reviews* embrace comments on Dr. Lawson's translation of De Quatrefages's "Metamorphoses of Man and the Lower Animals," and Dr. Ogilvie's "Genetic Cycle in Organic Nature;" on Dr. Druitt's "Our Wines;" on Prof. Houghton's "Manual of Geology;" on Jeffry's "British Conchology;" on the Rev. Mr. Brown's "Ice Caves of France and Switzerland;" on Mr. Newman's "British Ferns;" and on "An Essex Rector's Man's Age in the World." The Scientific Summary is, as usual, a good record of what has been brought forward during the quarter, but it may be remarked that the new theory of the Origin of Coal is due to Mr. Wm. Young, of Gower-street, and was first published in March last; it is referred to in another column of this day's Journal.

"SCIENCE GOSSETT."—The October number of "Hardwicke's Science Gossett," fully maintains the character which the work has enjoyed since its first publication—that of a most useful periodical, in which much sound science, in a very attractive and entertaining form, is placed within the reach of all. If either paper can be regarded as more interesting than the rest, perhaps Mr. M. C. Cooke's paper on Toots (very ingeniously derived from Toots!) would be entitled to be first named; but Mr. Lord's Humming Birds, Mr. Roberts's Polarized Light, and several other papers, are almost equally attractive and instructive. The "Gossett," or miscellaneous portion, is of the usual varied character.

RAILWAY CALLS.—The amount falling due in October is 1,410,350l., making the total called in the ten months of 1865 12,336,555l.

GREAT MONA MINING COMPANY (LIMITED).

Capital £25,000, in shares of £25 each.
First issue, 2500 shares.
10s. per share to be paid on application, and £1 on allotment.
It is anticipated that not more than one-half the capital will be required to fully develop this property throughout its whole extent, and place the mines in a dividend-paying condition.
Calls not to exceed £1 per share, and at intervals of not less than three months.
Registered office, 17, Cross-street, Manchester, where prospectuses may be obtained and samples seen.
The SHARE LIST will FINALLY CLOSE on the 10th inst.
JOSEPH TAYLOR, Sec.
P.S.—About 18 to 20 tons of lead and copper ore has already been taken out of the mine, and is waiting shipment.

GALE'S PROTECTED GUNPOWDER COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, with limited liability.
Capital £200,000, in 8000 shares of £25 each. Deposit £1 per share, and £3 on allotment.
Calls not to exceed £3 per share, and at intervals of not less than three months.
1000 shares fully paid-up will be reserved for the inventor.
It is contemplated that not more than £10 per share will be required for a considerable period of time.
DIRECTORS.
Sir JOHN C. DALRYMPLE HAY, Bart., 108, St. George's-square—CHAIRMAN.
THOMAS BRASSEY, Jun., Esq., 4, Great George-street, Westminster.
Sir ARTHUR W. BULLER, M.P., 20, Queen's Gate-terrace.
Col. DE BATHE, Fusilier Guards, 3, Morpeth-terrace.
The Hon. HENRY W. PETER, Esq., Springfield, Chelmsford.
JOHN GILBERT TALBOT, Esq., 10, Great George-street, Westminster.
CONSULTING MANAGER—Mr. James Gale.
BANKERS.
Messrs. Barclay, Bevan, Tait, and Co.
Messrs. Ransome, Bouverie, and Co.
Messrs. Heywood, Brothers, and Co., Manchester.
North Western Bank, Liverpool.
Town and District Bank, Birmingham.
English Joint-Stock Bank, Bristol.
Devon and Cornwall Banking Company, Plymouth.
SOLICITORS—Messrs. Marchant and Pugh, 30, Great George-street, Westminster.
BROKERS—Messrs. Hoggins and Knowell, 1, Threadneedle-street.
AUDITORS—Messrs. Johnston, Cooper, Wintle, and Evans; Mr. T. Walliker.
SECRETARY (pro tem.)—Mr. David Ker.
TEMPORARY OFFICES.—132, GRESHAM HOUSE, OLD BROAD STREET.

This company is formed for the purchase and use in the United Kingdom of Mr. Gale's valuable invention for rendering gunpowder non-explosive and explosive at pleasure, and for protecting gunpowder from damp—an invention admitted to be of national importance. The objects of the company will be as follows:—
1.—To manufacture and sell the protecting material ready for use.
2.—To grant royalties and licenses to gunpowder manufacturers and others for the use of the invention.
3.—To purchase or manufacture gunpowder and supply it to the public in a protected state.
4.—To enter into contracts for the storage and transit of gunpowder to any part of the United Kingdom or elsewhere; and the application of the invention to all the other purposes of which it is capable.

The inventor has obtained certificates of protection under the Patent Laws, and has agreed to sell, free from all incumbrances, and free from the expenses attending the formation of the company, such as printing, brokerage, law expenses, &c., the whole of his interest in the invention so protected, so far as the same applies to the United Kingdom, for the sum of £50,000, to be paid £25,000 in cash, and the remainder in fully paid-up shares of the company. The shareholders will thus be relieved of all the preliminary expenses connected with the formation of the company prior to the allotment of shares.

Mr. Gale has consented to act as consulting manager of the company for three years. The following extract from the *Times* newspaper of the 31 of August last will show that the invention has been thoroughly tested by repeated experiments before the Government authorities and others.

"EXPERIMENTS AT WESTMINSTER.—These interesting experiments—having for their object to show how gunpowder can be rendered non-explosive, and yet have its explosive properties restored at pleasure—were repeated yesterday at Westminster, in presence of a distinguished company. They have been already performed at Devonport in presence of Lord Templetown, Admiral Fremantle, and a number of other military and naval officers of distinction assembled for the purpose; at Mount Edgecumbe in presence of their Royal Highnesses the Prince and Princess of Wales; at Wimbledon on the grounds of the National Rifle Association, before the Secretary of State for War; and afterwards, by the noble lord's desire, in the presence of the Ordnance Select Committee at Woolwich; at the French Embassy; and, on Tuesday last, in presence of his Royal Highness the Commander-in-Chief, the Quartermaster-General, the Adjutant-General, and other heads of the military profession."

The following extract from a recent report of G. P. Bidder, Esq., the eminent civil engineer, shows in concise terms the importance and commercial and practical value of Mr. Gale's process:—

"In short, I may sum up the results by stating that gunpowder may now be conveyed, stored, and used by means of this process with absolute safety to the public. On the whole, therefore, I am clearly and decidedly of opinion that for all commercial purposes Mr. Gale's device, in the presence of the certainty in almost every case of securing an absolute economy to the consumer, while at the same time securing the public from the recurrence of those distressing accidents to which the use of unprotected gunpowder is necessarily exposed. No one resident in a town of any size can be certain that he is not within the influence of an explosion of from 1 to 2 cwt. of gunpowder. Our police reports indicate the reality of the source of danger; but if it is rendered illegal for any person whatever to have in his possession any quantity of gunpowder, except as a compound, the cause of apprehension would cease."

The above extracts demonstrate that Mr. Gale's invention affords an absolute protection against explosion. As an illustration of the risks inseparable from gunpowder in a non-protected state, it may be mentioned that during the last twelve years upwards of fifteen serious explosions have been recorded in the public journals, by which more than 600 persons have been killed, and many thousands persons wounded, and property to the extent of more than 2,000,000l. have been destroyed. And the *United Service Magazine* observes:—"In all probability numbers of missing vessels have totally disappeared in the midst of the ocean in consequence of having gunpowder as part cargo."

The directors will at once commence operations with the supply of blasting, rifle, sporting, and other kinds of gunpowder manufactured in England is shipped in an irregular manner and without appearing in the ships manifest, it is impossible to estimate the total amount of the manufacture. It is, however, certain that if only a fourth of the gunpowder made is protected by Mr. Gale's process, and a very small royalty paid upon it, a large revenue will be derived from this source alone.

The danger and difficulty which at present attend the transport and sale of gunpowder so enhance its price as to leave room for a large margin of profit on the sale of the protected gunpowder; and some of the leading railway companies and shippers have already expressed their willingness to arrange for the carriage of the protected article at greatly reduced freight.

In addition to the revenue to be derived from the sale of the protected gunpowder, and from royalties and licences, it is believed that a considerable amount will be received from the other sources named above, such as the sale of the protecting material and the contracts for the storage and transport of gunpowder.

The materials used in the manufacture of the protected powder are of an inexpensive character, whilst the working of the invention is simple, and can involve no elaborate or costly machinery. It is, therefore, believed that but a small proportion of the capital will be required to be called up.

The Articles of Association are open for inspection at the offices of the company, and also at the solicitor's office, 30, Great George-street, Westminster.

In the event of no allotment being made the deposits will be returned in full. Applications for shares, accompanied by a remittance for the deposit, may be made to the bankers and brokers.

THE CREDIT FONCIER AND MOBILIER OF ENGLAND (LIMITED).

Notice is hereby given that the HALF-YEARLY GENERAL MEETING of this company will be HELD at the London Tavern, Bishopsgate-street, London, on TUESDAY, the 14th October, at Eleven o'clock A.M. precisely, for the purpose of receiving the directors' and auditors' report and balance-sheet, and for declaring a dividend. The transfer-books of the company will be closed from Saturday, the 29th to Saturday, the 28th October, both days inclusive.

By order of the Court of Directors, ALFRED LOWE, Secretary.

THE CREDIT FONCIER AND MOBILIER OF ENGLAND (LIMITED).

Capital £4,000,000, in 200,000 shares of £20 each.
Capital subscribed, 100,000 shares (first issue), £2,000,000.
Capital paid-up in respect of £25 per share, £500,000.
Reserve fund, £200,000.
Dividend reserve fund, £70,000.

DIRECTORS.
The Right Hon. JAMES STUART WORTLEY—GOVERNOR.

JAMES LEVICK, Esq., merchant, King's Arms-yard. (Limited.) DEPUTY.

JAMES NUGENT DANIELL, Esq., Chairman of the Alliance Bank, &c. GOVERNORS.

JAMES CHILDS, Esq., London.

WILLIAM DENT, Esq., Esq., Chairman of the Thames and Mersey Marine Insurance Company (Limited).

ALEXANDER DUNBAR, Esq., Old Broad-street, London.

CHARLES ELLIS, Esq., Lloyd's.

ADOLPHE HAKIM, Esq. (Messrs. Pinto, Hakim Brothers, and Co.), London.

WILLIAM HARRISON, Esq. (Messrs. Young, Harrison, and Bevan), Director of the Thames and Mersey Insurance Company.

RICHARD STUART LANE, Esq. (Messrs. Lane, Hankey, and Co.), London.

CHARLES E. NEWBORN, Esq., London.

HENRY POWELL, Esq., J.P., Russell-square, London.

JOSEPH MACKRILL SMITH, Esq. (Messrs. J. Mackrill Smith and Co., Old Broad-street, London).

EDWARD WARNER, Esq., M.P., London.

JAMES WHITE, Esq., M.P.

ALBERT GRANT, Esq., M.P.—MANAGING DIRECTOR.

BANKERS.
The Agra and Masterman's Bank (Limited).

Messrs. Smith, Payne, and Smith.

The National Bank, London, Dublin, and its Branches in Ireland.

The Alliance Bank (Limited), London, Liverpool, and Manchester.

SOLICITORS—Messrs. Newborn, Evans, and Co., Nicholas-lane, E.C.

SECRETARY—Alfred Lowe, Esq.

OFFICES.—17 and 18, CORNHILL, LONDON.

MR. BRENTON SYMONS INSPECTS AND REPORTS ON ANY MINERAL PROPERTY. In all cases where procurable a plan will accompany his report.—18, Hatton-garden, E.C.

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the *Numbers* during the past year being out of print, we recommend that the *Journal* should be regularly *re-issued* in receipt: it then forms an accumulating useful work of reference.

COPROLITES.—In answer to your correspondent, Coprolites, in plain language, is the fossil dung of extinct animals. It is largely used in the manufacture, and also in the adulteration, of artificial manures. Large quantities have been raised in the neighbourhood of Ipswich, where it is found in beds of moderate thickness, and at various depths; it brings about 12 per ton. I should think a market could easily be found for any quantity.—J. Y. W.

IODINE.—In reply to your correspondent, "F. N." in the *Journal* of September 16, it may be stated that a new mineral of lead has been discovered in Chili, containing 10 per cent. of iodine. It would be interesting to know whether this valuable mineral exists in any of our home mines; it would prove of very great value to the adventurers any mine in which it is found to exist.—N. E.

FINANCIAL INSURANCE COMPANY.—Can any reader give me information respecting this company, which came out in April last with a respectable directory? What are we to hear anything more about it?—A SHAREHOLDER.

WIGAN MAIN ARLEY MINE COAL COMPANY.—Can any of your readers oblige me with any information about the above concern, which came out, and had 12 paid on its shares, in April last, since which time I have only seen some remarks from correspondents in the *Journal* about it, by no means encouraging?—E. H. H.

JOINT-STOCK COMPANIES LAW.—The directors, at their first meeting, passed a resolution appointing a consulting engineer. Is it requisite that he should be re-appointed annually, or does it hold good until the resolution is rescinded? Is he not entitled to be informed by the secretary if any alteration takes place?—ANON.—[Unless the resolution stated that the appointment should be for a limited period only, it would continue until a resolution annulling the appointment were passed. The secretary would be bound to give notice of any alteration.]

JOINT-STOCK COMPANIES LAW.—Sir: Supposing a case in which a mine has been carried on under the Limited Liability Act, and though a solicitor has been employed at a high salary, no Articles of Association have been provided by him or the directors. An adventurer having applied for a copy, supposing, as a matter of course, that he had been duly provided, loses an opportunity of disposing of his shares, in consequence of the articles not being forthcoming, what remedy, and against whom, has he? Is the company's funds or out of the pockets of those whose dereliction of duty occasioned the loss?—A VERY EXHAUSTIVE SHAREHOLDER.—[It does not at all follow because a company appoints a solicitor that such solicitor is forthwith to draw up Articles of Association, because a good code is provided in the Act, and has full force as regulations of the company, unless it is specially rescinded. The directors are not liable to penalty for failure to register special articles, and, in the case put, there appears to have been no dereliction of duty.]

COST-BOOK SHARES.—"Beta" (Southport).—It is not usual for certificates of shares to be made in cost-book shares. Shares are transferred by a "Cost-book Notice," which is recognised by the Legislature, and for which a special stamp duty has been paid. If "Beta" has "received the Memorandum of Registration from the purser of the mine," no question can afterwards arise that he possesses the rights and liabilities attaching to the shares referred to in such memorandum.

EAST CAMBRIAN GOLD.—Can anyone inform me what has become of the East Cambrian Gold Mining Company (Limited), whether its affairs are wound-up, or what the directors of it are doing? Perhaps some of your readers, shareholders in it like myself, would be kind enough to tell me in your next.—EXPECTANTS.

PRICES OF METALS.—COPPER.—Being a large buyer of sheet copper, can you inform your readers why the quotation in the *Journal* should be 91s. per ton, when the actual price paid in the market is 93s. 2? Copper merchants and smelters say it is because they have combined together to give to shipping orders for abroad the advantage over the home consumer of the difference of 21s. per ton, or nearly 3d. per lb. This is a great injustice to the home consumer, and has no doubt a great deal to do with the present depressed state of the copper trade, as it prevents to a great extent the purchases of the users of copper goods. But, at all events, the public have a right to expect that the quotations in the *Journal* should not be lower than prices actually paid.—JOHN ROBERTS and SON, Copper Nail Manufacturers, Leeds.—[We insert the above at the request of our correspondents, but at the same time may state that the quotation given by us was that generally ruling on the market, and at which any amount of business could be done.]

TREASURER AND SOUTH CONDUROW.—I read with much pleasure the letter inserted in last week's *Journal*, signed "Observer," and will have it for all parties having the true interest of British mining at heart if they would adopt his advice, and learn that Truth is a much better instrument to work with than Fiction. I am led to make remarks from the report made by the agents of South Condurow Mine, and who, from all I can hear, are men of great trust and responsibility; and having been a shareholder for many years past I have watched both the conduct of the agents, as well as the progress of the mine itself, and have never, with regard to the Messrs. Treves, had cause to change my favourable opinion long since formed of them. I believe the weekly reports sent for insertion in the *Journal* to be truthful to the letter, and sure I am that they would be highly delighted to report a good discovery; but on reading last week's report, though the progress making in laying out the mine I all that can be wished, it reads very different from a couple of advertisements inserted in your *Journal* of the same date—one giving the world at large the information that South Condurow is a first-class investment, the lode being worth 40s. per fathom; the other stating that there is a splendid lode in the mine, worth 30s. per fath., and unobtainably recommending his friends to buy for a great rise. Now, these are either truths or fictions, and I would earnestly advise all parties before buying to ascertain, through their own agents inspecting the mine, its actual state, before listening to the gratuitous advice given by parties who, there cannot be a doubt, have interested motives in view. That South Condurow will ultimately prove a splendid property I have no doubt, but time is required to make a mine, and it would be well, to prevent disappointment, to instil this into the minds of speculators on their purchasing South Condurow shares, at the same time taking to heart the advice of "Observer," that Truth is a much better instrument to work with than Fiction.—A SHAREHOLDER OF SOUTH CONDUROW OF LONG STANDING.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, OCTOBER 7, 1865.

The Board of Trade Returns have been made up for the month, and the eight months ending August 31, and as respects the exports of the United Kingdom, the produce and manufacture of this country, they show a total decrease of 6,315,523l. for the longer period, as compared with the corresponding months of last year, the difference of 102,400,696l. and 108,716,219l. the respective declared value, but the aggregate of this year is 12,728,845l. in excess of 1863, when the total was 89,751,851l., so that, although the present year is behind the last in general amount, it is in a depressed state, as accidental circumstances may have swelled the figures in the one case and depressed them in the other. The declared amount for the month is 14,158,648l., against 16,274,269l. in August, 1864, and 14,088,814l. in the same month of 1863.

Articles connected with mining industry show a decrease of only 675,955l., as their portion of the general decrease of 6,315,523l., which is an important feature, for usually the proportion of increase is about one-fifth, but the decrease in this instance is about one-tenth. The total value for the eight months is 21,379,087l., against 22,055,042l. in 1864, and hence the difference as mentioned. There is increase under four heads, and decrease under seven. The four consists of 514,689l. in machinery, 179,754l. in coals and culm, 39,907l. in hardware and cutlery, and 13,056l. in brass, making a total of 747,406l. The decrease shows a total of 1,423,361l., being found by iron to the extent of 892,104l., copper 182,417l., lead 164,983l., steel 112,437l., zinc 29,285l., tin unwrought 23,338l., and tin-plates 18,797l.

The interchange of the precious metals and bullion, between this and other countries, is again materially in favour of ourselves, but which naturally has been looked for from the position of the several money markets and state of exchanges. The exports of England during the eight months amounted to 8,834,897l., and the imports to 13,945,668l., so that the balance to credit is 5,110,771l. The exports consisted of 4,878,897l. in gold, and 3,956,000l. in silver, while the imports were 8,876,597l. in gold, and 4,369,068l. in silver, so there was a gain of 4,002,730l. in gold, and 408,068l. in silver. The greatest import was from Mexico and South America, which furnished 5,257,913l. against only 316,578l. exported to those countries; the United States, 3,126,223l. against 18,250l.; Australia, 1,916,808l. against 37,388l.; Portugal, 641,043l. against 80,943l.; British North America, 121,191l. against 60,378l.; West Coast of Africa, 85,111l. against 42,094l.; Turkey, 15,513l. against 3034l.; and from other countries, 291,416l. against 22,971l. Our largest export was to Egypt, as usual, where we sent 2,672,523l. against 21,555l. received; to Spain, 1,752,235l. against 274,891l.; to Spain, 1,287,960l. against 21,555l.; to Holland, 1,067,179l. against 39,972l.; to Hanse Towns, 526,848l. against 14,580l.; to Belgium, 510,555l. against 142,221l.; and to Brazil, 488,801l. Without making shipments in return, we imported 53,576l. from South Africa; from Gibraltar, 57,055l.; from Russia, 19,377l.; and from Malta, 2612l.

During the month of August we exported specie to the extent of 1,065,059l., and imported 1,693,718l., so that there was a sum of 628,659l. in our favour.

In the face of these figures, however, the Bank of England has raised the rate of discount to 6 per cent., so that whatever may have led to the rector's to this result, it is clearly intemperate; and, consequently, whatever absorption there may be of gold, it can only be temporary, and must turn to their own coffers in due course of business. It is, indeed, difficult to see why the Bank has adopted this course, even for the time being, and

stages without opposition. Specifications were drawn up, contracts taken, and in December of last year the work was fairly commenced. A weir was thrown across the Allan, about 1½ mile above its point of confluence with the Terviot. On the upper side of the weir a large square well or pit of masonry has been formed. Into this well the water is conducted by means of a 12-inch iron pipe, supplied with a sluice-valve, which may be opened or shut at pleasure, so as to prevent the water, when maddy, from running into the reservoir. The water which passes through the sluice is discharged into a well 9 feet deep, and close to the reservoir. From this well there is a pipe to the reservoir, another of 10 inches diameter, going direct to the town; and a third at the bottom, leading back to the Allan, to be used when the well requires cleansing. The reservoir averages about 10 feet in depth, and is capable of containing nearly 2,500,000 gallons; it is formed by an embankment on two sides of its circumference, the natural hill on the other side being excavated to some extent. The greatest depth of the embankment is 30 feet; it is formed in the usual way—with a puddle dyke in the centre, protected by a clay embankment, pitched or paved on the top and on the inner slope next the water. The sluices leading from the reservoir are guarded by fine wire-cloth, and if this be not sufficient to ensure purity—which is questionable—filtering-beds will have also to be constructed. The total length of piping is 8469 yards, of which 7953 yards are of vitrified clay, made by WILSON and SOX, of Dunfermline, and 916 yards of iron, including two inverted siphons over ravines. New piping has been laid down in all the principal streets of the town; and the abundance of the water supply has enabled the Town Council to plant fire-plugs at intervals of 70 yards. The pressure will be sufficiently great to make them very useful in case of fire. The fall from the Allan is 1 in 1000, and the distributing reservoir is 120 ft. above the level of the High-street. The iron pipes are laid through plantations principally. In an engineering sense, the works were not difficult, though hard rock was encountered in certain places, and especially in the neighbourhood of the intake sluices. In the construction of the reservoir some trouble was experienced in obtaining a foundation for the puddle trench, a layer of quick-sand, 1½ feet in thickness, having to be cut through. The pipe-track is 5½ miles in length, and this part of the contract was executed by Messrs. PATERSON and THORBURN, at a cost of 2000*l.*, the total expense of the whole arrangement being 7000*l.* A water-gauge has been placed in the Police Office of the town, and this shows with great accuracy the extent of the supply at all times. That supply will be undoubtedly ample, not only for the wants of the present, but for those of a largely increased population; and it is pretty generally admitted that the best means of supplying the town have been adopted. Taking the number of inhabitants to be 12,000, each individual will be furnished with 36 gallons of water per day, a sufficiently liberal allowance.

The Duke of HACCLEUGH, who may be said to be the owner of the whole district surrounding Hawick, and through whose property the pipes have almost exclusively been laid, has acted with extreme liberality in the matter, and thus entitled himself to be regarded as a public benefactor. His Grace formally inaugurated the new water-works on the 22d ult., and henceforth the reproach and the nuisance of a defective water supply will be unknown in the border town in question. We can only wish that in these days of cholera and of fever every other town in the kingdom may follow the example of Hawick, and arm itself with one of Nature's best antidotes to disease—*abundance of water*. It would be unjust to conclude this notice without a word of commendation to Mr. LESLIE, his inspector, Mr. FENWICK, and the staff of officials and workmen employed under their supervision. The work was executed with great rapidity, and without accident.

THE DUBLIN EXHIBITION.

LIST OF EXHIBITORS FOR WHOSE MACHINES, ETC., PRIZE MEDALS
HAVE BEEN AWARDED.

LEBLANG, D. F., 102, Fleet-street, City, London, E.C.—For his diaptical water-gauges for steam-boilers.

RUSSELL AND SONS, J., Wednesday.—For their wrought-iron tubes.

SPENCER AND SONS, J., Newcastle.—For their railway spring-buffers, &c.

BOSKER AND CO., J. H., Griffith Works, near Cardiff.—For excellent quality of iron.

TURNER, W., Hammersmith Ironworks, Dublin.—For original designs, of great merit.

SHARP, STEWART, AND CO. (Limited), Atlas Works, Manchester.—For their machine tools, and for ingenuity and excellence of workmanship. [machine.]

EASTON, AMOS, AND SONS, Southwark, London.—For excellence of slate-dressing.

HUNTER, G. O., Maentwrog, Merionethshire, North Wales.—For ingenuity and progress in slate-cutting machinery. [Iron of steam-engines.]

KAY, J. C., Phoenix Foundry, Barry, Lancashire.—For excellent design and execution.

HACKWORTH, J. W., Darlington Engine-works, Darlington.—For ingenuity and design of a remarkably elaborate steam-engine.

STROUDON, Bailey, near Leeds.—For his steam-hammer and for progress.

MIR, W., and the excellent collection of machine-tools, lathes, &c.

SCHAEFER AND BUDENBERG, George-street, Manchester.—For water-meter and pressure-gauges. [Rotherham, Yorkshire.—For excellence and progress.]

OWEN'S PATENT WHEEL-TYRE AND AXLE COMPANY (Limited), Phoenix Works, Courtney, Stephens, and Co., Bluchhall-place, Dublin.—For ingenuity, progress, and a great variety of excellent machines and apparatus.

DERING, G. E., Lockleys, Welwyn, Hertfordshire.—For invention and progress in the construction of the permanent way of a railway.

THE BROUGHTON COPPER COMPANY (Limited), Broughton Copper Works, Manchester.—For a fine collection of copper tubes, &c. [Iron.]

MOORE AND MARNEY, Dudley, and 3, Billiter-square, London.—For collection of rolled iron and steel.

PENN AND SONS, J., Greenwich.—For models and excellence of workmanship.

KRUPP, F., Essen, Rhensia Prussia, and 11, New Broad-street, London, E.C.—For progress in the manufacture of steel; also for the invention of a steel 110-pounder gun.

WYLL, W. H., N. 10, For.—For ingenuity in the construction of railway turn-tables.

SIMMONS BROTHERS, 8, Great George-street, Westminster, S.W.—For a fine collection of excellent electric apparatus for telegraph purposes.

GIBBONE, F. N., 445, West Strand, London, W.C.—For a most useful invention of patent electric signals.

GLASGOW, OCT. 4.—Monster meetings, followed by "strikes" of workmen, seem to be the order of the day. One is almost tempted to suppose that this is the next "plague" which is to test the principles of our social economy, and if not wisely checked they may prove widely destructive. Returning prosperity in the cotton trade has this week set a thousand tongues clamouring for a rise, and a "strike" is the consequence. The ironstone miners in and around the city held a meeting last week at Stockingfield, near Maryhill, a couple of miles from Glasgow, which was attended by representatives from Carron, Langloan, Summerlee, Calderbank, Clyde, and Govan Works. Their "demand" was 1s. per day advance, and "black mail" was levied on the men at work to carry on the "strike." To help matters, a Mr. Swan, of Manchester, harangued the boiler-makers and iron shipbuilders in the Trades' Hall, on Friday evening, on "The objects and advantages of union." The hall was crowded in every corner. The pleadings of the orator went to show that the wages of the men were injuriously affected by the competition of the times—the low estimates of employers re-acting on the workmen, and compelling masters to reduce the wages of those in their employ, &c. Simultaneously with these demonstrations, the Clackmannan miners were cheering themselves with similar greetings. The masters in their locality were averse to granting a rise in wages, but the colliers agreed that they must have enhanced rates, or else they should cease working in seven days. The workers at the Murray Hall Lime Pits, near Alloa, have also resorted to striking, and are rejoicing themselves in idle-set till the proprietor chooses to divide his profits amongst them. The blacksmiths at Dumbarton continue on strike, and the labourers and other workmen have been paid off till it pleases the blacksmiths to return to their anvils.

The railway interest is acquiring power and strength, by the larger absorbing the shorter lines, which diverge from the great trunks, and thus, instead of a number of isolated interests, one great power controls them all. What advantages the public may derive from these amalgamations is not quite safe just yet to say; but these combinations ought, undoubtedly, to facilitate more economical travelling by rail, and lessen the expense of the general management of the lines as well as of the rolling-stock. The dividends of the Scotch companies which have been declared, show that the profits from railway stock are on the increase, while the alliances which have been recently entered into will give greater unity of action, foster the development of traffic, and ought to cheapen the price of locomotion from point to point.

The shipments of PIG-IRON from the Scotch ports for the week ending Oct. 3 are—14,728 tons, against 14,228 tons; total for the year, 529,577 tons; increase, 34,904 tons. The market has been scarcely so good since this day week; business done at 58s. 6d. to 57s. 6d. cash, and 58s. 9d. to 57s. 9d. one month. To-day, however, prices have advanced 6d. per ton; 57s. 10½d. and 58s. cash, and 58s. 1½d. to 58s. 3d. one month, paid: buyers remaining at the highest quotations. For shipping brands the prices are—No. 1, Coltness, 67s. 6d.; Gartsherrie, 66s. 6d.; No. 1, g.m.b., 58s.; No. 3, 57s. 3d. The prices of MANUFACTURED IRON became even firmer after my last letter, and things looked exceedingly well for the close of the autumn trade; but the market has been acted upon by the fall in pig-iron, and the advanced rates of discount, which has checked business.

in shipping and merchant iron for the moment. BARS, in addition to the advanced quoted last week, have still an upward tendency, while ship plates have a tendency, if anything, to a decline. Scotch makers are adhering to their quotations, but North of England makers are offering plates in the market at rather under local rates, and some business has been done at their prices. The shipbuilding trade of the Clyde continues to show a decided falling off as compared with the last two years, more particularly during the last three months, the total number and tonnage of vessels launched during the month, quarter, and three-quarters, ending Sept. 30, being:—

	1863.	1864.	1865.
Vessels. Tons.	Vessels. Tons.	Vessels. Tons.	
September.....	11 .. 9000	17 .. 17,750	10 .. 4700
Three months.....	33 .. 32,000	59 .. 55,400	37 .. 21,600
Nine months.....	107 .. 85,000	166 .. 133,000	133 .. 99,200

Had not these inauspicious circumstances intervened, we had all the appearance of going into a fine autumn trade, and we may have it here yet. Founders are all doing an excellent trade, and the demand for pipes continues with little abatement. On Monday a sixth blast-furnace was lighted at the Portland Ironworks, Ayrshire, and other improvements and enlargements have taken place since its purchase by the Eglinton Iron Company. The collieries of the company are all in active operation, and the houses which are being erected for the workmen, it is hoped, will have at least a "kale-yard" attached. COALS are in very active request, and prices have advanced from 3d. to 9d. per ton for home use, shipping qualities having a less advance. The exports from Scotch ports were, this week, 25,500 tons, while in the corresponding week last year they reached 28,000 tons. Large shipments have taken place to the West Indies during the week. To the Baltic, Mediterranean, and Canadian ports there has been a slight decline, but the coasting trade is very active. The colliers are still holding on for an advance, and several of the masters have compromised matters by granting 6d. advance per day.

The Forth and Clyde Junction Railway have declared a dividend of 5 per cent. per annum on their first preference shares, 5 per cent. on their second ditto, and 6 per cent. on another second-class preference share. Three per cent. has been voted by the North British Company; and the Greenock and Wemyss Bay Railway have ordered 5 per cent. to be paid their preference shares. The dividends of the Dumbarton, Dumbarton and Callander Companies are—Ordinary shares 4½, and preference shares 5 per cent. This company, like the Scottish Central, forms part of the Caledonian system.

The Edinburgh and Glasgow Railway Company held another adjourned meeting at the close of last week, for the purpose of hearing the report of the scrutineers appointed to examine into the votes given in person and by proxy at a former meeting, and distributing a portion of the funds in compensations to the Chairman and other officials of the company. The meeting was characterized by the same boisterousness and indecision as its predecessors, and, after coming to a dead fix, terminated in another adjournment till December 12. In the meantime an interdict fetters every movement of the directors.

The London Shipbuilding Works, Renfrew, yesterday launched a fine vessel, named the *Sunda*, for the Netherlands India Steam Navigation Company, and intended for the mail traffic to India. It is fitted with every convenience for a warm climate, and its boilers are so designed that it consumed only 2½ lbs. of Scotch coal per indicated horse-power on a trial of 130 miles.

As an instance of rapid ocean steaming, while reflecting honour on the Clyde shipbuilders, we may mention that letters have been received here intimating the arrival at Valparaiso of the Pacific Steam Navigation Company's steamer *Limena*, of 2000 tons and 400-horse power, in the shortest time on record—30 days 23 hours, steaming time from Liverpool, averaging a speed of 12½ knots per hour, the entire distance of 8000 miles, upon a consumption of 880 tons of coal for the whole voyage. The *Limena* is the construction of Messrs. Randolph, Elder, and Co., Glasgow, and is one of four steamships built this year for the same company.

The Duke of Argyll entertained the Chancellor of the Exchequer and a distinguished party at Inverary Castle last week. The exciting sport of other hunting engaged their attention for several days. Mr. Gladstone, accompanied by his Grace the Duke of Argyll, is expected to spend a few days here at the close of this or the beginning of next week. The right hon. gentleman will, no doubt, meet a most cordial reception in this city. We have also had lecturing here this week, for the benefit of the funds of the Glasgow Athenaeum as well as his own, Mr. G. A. Sala, of London. His debut as a lecturer is of happy augury, and was a great success. He delivered three lectures on the "Phases of Civilization," the United States, Mexico, and Algeria forming the texts. The hearty way in which he was applauded by the auditory proves that his light and jaunty sketches, when correspondent of the morning papers, were both read and appreciated. He is the guest of our worthy M.P., Mr. Robert Dalglish, of Kilmarnock, and he could hardly have fallen in with better keeping. "Glasgow," we understand, is to be added to his "Streets of the World," and this is one of the objects of his visit to the commercial metropolis of Old Caledonia.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

OCT. 5.—The state of trade here calls for no new remark. There is a steady demand for manufactured iron, except for plates for shipbuilding, which have not been in active request for some time. The Hardware Trades are, on the whole, improving, and rather more orders are in hand for the United States.

Allusion has been made in several recent letters to the question of the existence of the South Staffordshire seams of coal and ironstone beyond the present limits of the coal field, at depths which would enable them to be worked profitably. For some time borings have been carried on in the Hales Owen Valley, in Worcestershire, south of the proper South Staffordshire coal field, with a view to test the existence of coals there at a moderate depth. Mr. J. S. Dawes has had the co-operation of other owners of mineral property in carrying on these experiments, and in a letter to the *Birmingham Daily Post*, dated Sept. 30, he says—

"It will be a satisfaction to some of your readers to learn that the stratum of coal, known to colliers as the 'Black Ring,' was passed through yesterday at the Manor sinkings, and as this is a well defined and characteristic measure in the thick coal series, a more accurate opinion may now be formed as to the position of the 10-yard seam, which will be met with at about 500 feet from the surface, or within a few yards of that depth, more or less, and will prove that certain learned geologists have been very inaccurate in their opinions upon this point. As the measures below the above-mentioned coal are regular and free from water, the difficulties of this undertaking are now overcome, and in all probability the trial will be completed before the close of the year."

The result confirms the anticipations which Mr. Henry Johnson, of Dudley, and other local geologists had formed, and is pretty sure to stimulate efforts on other sides of the district, whilst it tends to postpone to a very much more distant period that melancholy day for Britain when her stores of coal, or "bottled sunshine," as it has been well called, shall become exhausted.

Last week notice was taken of the meeting of the South Staffordshire Ironmasters' Association; this week an assembly of what some of that body would style "their masters" has been held at Wednesday—in other words, a meeting of delegates for eighteen districts, forming the Brierley Hill Union of Puddlers, or, as they term themselves, Ironworkers. At the Ironmasters' meeting, one subject for consideration was a scale of wages for puddlers, recommended by the W. 2. Wolverhampton Ironmasters, as the result of a conference which their puddlers had sought with them, the object being to fix the wages scale, so as to avoid strikes for the future. The delegates decided against the proposed scale, in the following terms:—"That the masters' proposition be swept from the board, as being preposterous." The feeling was, that whilst the proposed scale would recognise the advances of 1s. per ton, which the men have secured, that as the result of their increased combination, and the demand for labour, they may hope to secure further advances, and hence they are opposed to pledging themselves to any fixed scale. The Wolverhampton men, who were desirous to fix the rate so as to avoid strikes for the future, got snubbed. The meeting decided to vote 50s. for the purchase of shares in the *Bee Hive* Newspaper Company, and also to make a levy of 1d. upon each member towards the testimonial to its editor, Mr. George Potter, who has been censured by the London Trades Council for encouraging the last North Staffordshire puddlers' strike, and for opposing the Earl of Lichfield's proposal to have the question referred to arbitration. This Brierley Hill Association had at that time itself condemned the North Staffordshire strike, but many said their disapproval was only feigned, with a view to prevent the lock-out, and these two resolutions appear to show this suspicion was correct.

One of the special matters discussed referred to the works of Messrs. Lloyd, Foster, and Co., at Wednesday, where railway plant and material are produced on a great scale. Amongst other departments of these works is one for the manufacture of Bessemer steel, which, as recently described in the Journal, was visited by members of the British Association during their meeting at Birmingham. Two men employed as furnacemen in this department found fault with an arrangement at these works, by which they were paid by an employee, instead of at the office of the firm. In the course of the dispute an axe was split, and an investigation having taken place one of the men was discharged. He appealed to the delegates, representing that he was not in fault, and the result was that the president and secretary attended the works to ask for the man to be re-employed. No member of the firm was present, but a person in a responsible position said that he could begin to work again on the payment of a fine of 5s. To this the delegates refused to accede, and insisted on his being reinstated, and his requirements as to the mode of payment complied with, under the threat of a strike of all the Union men at Messrs. Lloyd and Foster's works. This is certainly taking very high ground.

Reference was made last week to the report of a committee presented to the Ironmasters' Association on the rates of transit for iron and minerals on the railways. The report shows that the greatest variation prevails in the rates charged. For instance, the rate to London is 39 per cent. above Glasgow, 60 per cent. above Hartlepool, 91 per cent. above Cardiff, 18 per cent. above Liverpool, and 40 per cent. above Bristol. In addition to this, it may be mentioned that the charge from Middlebrook to London—nearly 300 miles—is only 6d., or 1s. more than from South Staffordshire, which is only 126 miles; while from Warrington and North Stafford the railway charge is precisely the same rate as from South Staffordshire, which is at least 30 miles further.

The following is from a paper prepared by Mr. J. Jones, F.G.S., assistant secretary of the South Staffordshire Ironmasters' Association, for the British Association, but which time did not permit of being read, on the Iron Trade of South Staffordshire:—"The 119 furnaces now in blast are capable of producing nearly 15,000 tons per week, or at the rate of 125 tons per furnace. This represents an annual produce of at least 740,000 tons, which is about 28 per cent. of the total pig-iron made in England. The increase of production since 1849 has been very slight, but certainly has not decreased, as has been asserted. The remarks upon the general character of the blast-furnaces apply also to the forges and mills. The district, indeed, bears ample internal evidence that it has long manufactured iron. There are upwards of 100 forges making finished iron, and above half of these have less than twenty puddling-furnaces each. Only seven firms have more than fifty furnaces. The

iron is mostly of a first-class quality, and the best brands are a little inferior to the Bowling and Low Moor produce. It is estimated, from returns received from the manufacturers, that the annual make of finished iron is about 855,000 tons. There are 2100 puddling-furnaces, and of these about 1800 are at work on an average. The amount of wages paid in forges and mills is about 1,008,000, per annum. Steel is made to a small extent, and within the last ten years the Bessemer process has been in operation at Wednesbury. The average wages earned in the forges and mills is from 25s. to 30s. per week, including everybody engaged in the works. An analysis of the pay-sheets of two of the largest firms, gave 11. 6s. 6d. per head on 300 persons employed, and 11. 9s. 6d. on 900 persons employed in the works. Certain classes of the trade earn much higher wages, especially owing to the system of under-letting, by which one man may have several people working for him."

NORTH STAFFORDSHIRE COAL AND IRONMASTERS' ASSOCIATION.—The quarterly meeting of this association was held on Thursday, at Stoke-upon-Trent, Mr. F. Wragge in the chair. Those members of the association who had not already done so entered their names as subscribers to the fund recently established for supporting the masters in resisting, with the sanction of the association, any unjust demands on the part of their men. The meeting determined to affirm the resolution of the South Staffordshire Association not to alter the price of iron, which, therefore, remains at 8d. 10s. for bars at the works. It was stated, however, that in North Staffordshire sales are still being made for 7d. 10s. at the works, but improved prices are looked forward to with considerable confidence. Orders for plates continue to be deficient, but in this respect, too, the number of enquiries leads to an anticipation of a speedy improvement. The makers of pig-iron were firm, leading pretty well "sold" for the current quarter, and prices, which receded 2s. 6d. per ton six months ago, may be considered to have recovered to that extent. There is a fair demand for coal and ironstone, and prices remain firm.

REPORT FROM NORTHUMBERLAND AND DURHAM.

OCT. 5.—An important meeting was held at Sunderland on Monday, for the purpose of introducing to the inhabitants a new railway project—a coast line from South Shields, via Horton, Cleardon, Sunderland, Seaham, &c., to Hartlepool. There can be no doubt as to the importance of the project, and the necessity for its being carried out. The Great North-Eastern Company has to some extent neglected the towns named, and if a cheap line could be formed it would certainly obtain a large amount of patronage. But the above company have to a great extent the trade almost in their hands, and they will, no doubt, pay some attention to the matter, and remedy all defects, when they see it was competitor in the district likely to interfere seriously with their traffic; as the scheme looks at present this is most likely to be the effect produced, but it is hardly likely to succeed as an independent line. The estimated cost appears to be very large—about one million for about 35 miles, including the bridge over the River Wear.

The Strike at Cramlington still continues, with little prospect of its adjustment. A meeting has taken place between the parties, and an offer has been made to decide the case by arbitration, the masters "to send two gentlemen, who would examine the pit, and the men a like number; and in case these parties could not agree, a third party might be called in to give a final decision." The men have, however, rejected this, and demand an advance of 1d. per ton, previous to starting work. A long letter has appeared in the *Newcastle Chronicle*, which contains a dissertation on the law of supply and demand, &c., the object being to prove that arbitration is totally inapplicable to the present case. No doubt his doctrines are correct, taken as abstract questions, but they do not apply to this case, as the laws alluded to are suspended entirely in the steam coal trade. A compact union on each side prevents the action of those laws. Had this not been the case, the dispute would have ended some time ago, by the men leaving Cramlington for other places, and by the employers getting their men. But when the demand was first made by the men for an advance, the Coal Trade Committee sent two gentlemen to examine the pit, and the report stated that the prices at Cramlington were as good, and in some portion of the works, better than the average of the trade; hence the strike, as their demand was not complied with. The masters now, however, say that "if they had erred in their former report, they would be happy to alter it." There are, therefore, sufficient grounds for arbitration, and the dispute can, no doubt, easily be settled in that way, but the men still adhere to their absurd notion of "having the victory;" that is the gist of the matter, we are afraid. The masters only ask them to get to work, and terms will be made, but this they refuse to do. It is quite clear that the matter in dispute is a proper one for arbitration, as the question at issue is simply—the price at Cramlington as good as the average of the trade? The men say they are not, and the masters expect they are. However, this Union will, we believe, only have its day; it is utterly at variance with the spirit of the times, and it is inflicting great injury on both employers and employed. When it (the Union) is dissolved, the laws commented upon by "Britannicus" will again come into force, and the wages of the men may possibly be higher than at present, they will certainly not be lower; and although strikes may never cease altogether, we believe there will be less danger of them occurring.

A strike has taken place at the Netherton Colliery, near Morpeth. The coal tubs are taken from the hewers to the stations by boys and ponies, as is usual in the northern district, and the boys have had hitherto for this work 11d. per score of tubs. They have, however, lately asked for an advance of 3d. per score in one portion of the colliery, and 1½d. per score in the remaining portion. The owners agreed at once to meet them half-way in both cases; a pretty good offer, when it is considered that the advance asked is one case 27 per cent., and in the other 13½ per cent. This offer, however, has been refused, and a strike is the consequence. The whole of these extensive works are stopped for the time. There are about 40 putters employed, and about 270 coal hewers, besides a large number of other necessary hands.

A large Ventilating Fan was started at Pelton Fell Colliery, on Saturday, in the presence of a number of viewers and others interested in coal works. This is the second Ventilating Fan set to work in this coal field lately, the former one having been started at Elswick, a few months ago. The Pelton Fan is of large dimensions, being 30 ft. in diameter; and the quantity of air produced through the workings at the trial on Saturday was 100,000 cubic feet per minute. This is a great innovation, the furnace at the bottom of the shaft having as yet kept its place in this district, and the question as to the economy and efficiency of the two methods will be keenly discussed; the result cannot as yet be determined, but we expect to have some information to communicate on the subject shortly.

REPORT FROM MONMOUTH AND SOUTH WALES.

OCT. 5.—As was generally expected in this district, the Staffordshire matters determined, at the Preliminary Meeting, to adhere to the old scale of prices. The trade is unquestionably in a better state than it was three months ago, but the demand is not as yet such as to warrant a general advance. It is well known that up to about a month since the list quotations, as they are termed, were to a great extent nominal, but the case is different now, and hence the improved position of the trade. Orders are coming over by every mail from America, and it is the opinion of many that, despite protective tariffs, the trade with that country will be large before long. The continental markets are considerable buyers of railway iron, and there is every prospect of the demand not only keeping up, but increasing. The Eastern enquiry is slowly but gradually improving. On home account, there is a full average trade doing, the demand for all descriptions being remarkably good, with the exception of shipbuilding iron, which only commands a moderate sale. Pig-iron is in request, and the market is rather in favour of sellers. Unmistakable activity characterises the Tin-plate Trade, and makers have been obliged to refuse many orders. There are, in reality, no stocks in hand now, the sales having been so large of late, and it was determined at the quarterly meeting, held on Wednesday, to advance prices 2s. per box. It is the general opinion that quotations will not remain at the present figure, but that a further advance will take place shortly. The steam coal trade is moderately buoyant, merchants being fairly off for orders, and the house coal trade remains without change. The long-continued hot weather has caused a scarcity of water at some works, and unless rain falls soon, serious inconvenience and loss will be the result.

The story about a collier having inherited the Drummond estate, near Swansea, and 8000*l.* a year, which appeared in last week's Journal, is denied. Though the collier was a claimant, the heir to the property is Mr. Richard Backhouse, of Liverpool.

The new railway schemes that are to be promoted in the coming session of Parliament are now topics of general interest in the district, and there is no doubt that South Wales will occupy a large portion of the time of the Parliamentary Committees. As stated in last week's *Mining Journal*, it is in contemplation to apply for powers to construct a more direct line from Newport to the Aberdare coal fields, which will to some extent utilise existing lines. The Ebbw Valley and Cardiff Junction, which was abandoned last year in consequence of an arrangement between the then principal promoters and the Monmouthshire Company, is likely to be again brought forward, but not by the same parties. The object of the promoters is to open up a direct route from the Ebbw Valley to the port of Cardiff, so that the iron and coalmasters of the valley will then have the choice of shipping either at Newport or Cardiff instead of confined to Newport as is the case at present. The Brynmawr, Blaenavon, and Pontypool, the bill for which was lost last session, is another project for which powers are to be applied for, and the scheme, it appears, will be a little extended in its character this year. In Glamorganshire the Ogmore Company are likely to make another attempt to get a narrow gauge to Cardiff, and it is clear that they will have a strong case to put before the committee. In the western portion of the district the proposed Milford, Flad-guad, and Cardigan line is one of the most important projects mooted, and if successfully carried out there will be some hope of the great and almost unequalled natural advantages of the harbour of Milford being turned into practical account. The slate quarries that have recently commenced working in Pembrokeshire, and the mines of Cardiganshire and North Wales will be materially benefited by this line.

At the Swansea Police Court, on Saturday, David James, deputy-overman at Messrs. Williams, Foster, and Co.'s, Llanyfelach Colliery, was charged with having on Sept. 25 violated the 324 special rule of that colliery, by neglecting, or refusing, obedience to John Lowry, one of the agents. The defendant was committed for three months to the House of Correction. David Hopkins, a collier in the employ of the same parties, was charged with opening his safety-lamp, and smoking in the colliery, and he was committed for two months.

A new shore-end has just been laid of the telegraph cable between Aber-mawr, on the coast of Pembrokeshire and Wexford. The steamship *Monarch*, Capt. Blacklock, conveyed the cable, and it was laid under the superintendence of Mr. C. F. Varley, chief engineer of the Atlantic Telegraph Company. The new portion of the cable is much stronger than the part removed, so that the communication between Aber-mawr and Wexford is now in a safe state.

Mr. Robert Bond, traffic manager of the Sirhowy Railway, was on Fri-

day presented by the inhabitants of Newport and the neighbourhood with a testimonial consisting of a silver salver, with a suitable inscription, and a purse with 10*l.* enclosed as a mark of their appreciation of the manner in which he has for many years discharged the duties of superintendent on the Great Western Railway.

Mr. R. Williams, late agent to the Penylin Slate and Slab Company, has had a gold watch and chain, with a purse of sovereigns, presented to him as a testimonial, on his leaving Penylin for a new appointment at a quarry near Corva.

THE TIN-PLATE TRADE.—The quarterly meeting of the tin-plate makers was held at the Bell Hotel, Gloucester, on Wednesday, Mr. W. Wood, of the Machen Works, Monmouthshire, in the chair. Owing to the improved position of the trade and the largely increased demand, it was unanimously resolved to advance quotations 2s. per box, making the price 24*l.* for obtained three months ago. From the discussion which took place, it appeared that there had been a remarkable improvement in the trade since the last quarterly meeting, so much so that many orders had been refused. The American demand for tin-coated plates is now large, and the home trade is in a decidedly healthy state. Makers weeks past at prices nearly equal to the advance agreed upon, so that the rise of 2s. in the stocks that makers held a short time since have been "completely cleared." The large requirements of buyers, and unusual anxiety is now shown by purchasers for immediate delivery of orders, which, however, few of the makers are able to comply with, owing to the increased enquiry. It was stated at the meeting that Liverpool houses were offering within a fraction of the advance, and the general opinion prevailed, that, with a little unanimity on the part of the makers, prices would not only be maintained but there was every probability of a further rise before long. Upwards of twenty makers were present, and the meeting was one of the most successful ever held. The members, as usual, dined together after the meeting.

The arrivals at Swansea include—the Gamma, from Guayaquil, with 548 tons of unwrought copper in pigs, 161 tons of silver ore, and 90 tons of cobalt ore, for H. Bath and Sons; the Malda, from Calcutta, with 688 tons of copper regains, for H. Bath and Sons; the Sardinia, from Algiers, with 100 tons of copper ore, for H. Bath and Sons; the Cobra, from Calcutta, with 500 tons of copper regains, and 55 tons of copper ore, for H. W. Crawshaw; the Uncas, from Carrizal Bay, with 100 tons of iron ore, for H. Bath and Sons; the Onward, from Cherbourg, with 196 tons of copper regains, for H. Bath and Sons; the Eliza, from Langsund, with 300 tons of nickel ore, for H. W. Crawshaw; the Prima Donna, from Almeida, with 120 tons of zinc ore, for E. J. Jones; the Hesper, from Cherbourg, with 120 tons of iron ore, for Wm. Crawshaw; the Racomme, from St. Malo, with 180 tons of zinc ore, for W. Rowland; the Havre, from Havre, with 200 tons of zinc ore, for H. Bath and Sons; the Ida, from Malaga, with 180 tons of zinc ore, for H. Bath and Sons; the United, from Antwerp, with 200 tons of zinc ore, for H. Bath and Sons; the Mary Lester, from Antwerp, with 250 tons of zinc ore, for H. Bath and Sons; and the Blue Rose, from Montpelier, with 250 tons of zinc ore, for Vivian and Sons; San Sebastian, with 150 tons of copper ore, for H. Bath and Sons.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

OCT. 5.—The result of the Preliminary Meeting has produced an increased firmness in the Iron Trade, and business is better than it has been during any period last month. The orders are principally for immediate requirements, and prices are very firm, particularly for pig-iron. All descriptions of iron for railways are in active demand, and the manufacturers of this description of material have plenty of orders in hand.

The contracts of another section of the new line between Chesterfield and Sheffield were let, on Wednesday, by the directors of the Midland Railway. Most of the tenders were presented at Derby, and it was quite a sight to see the different contractors marching about in anxious expectation of the fiat of the railway directors. The contracts were let, but the names of the successful gentlemen were not allowed to transpire publicly. The works in the Norton district, near Sheffield, are progressing very rapidly, and we hear that the directors have imposed heavy penalties for delay, as they are anxious to get the work done. The making of the line will afford a traffic for an immense area of minerals, and as pits are actually in work, there would be a traffic immediately on the completion of the line, to say nothing of the large coal traffic which is now carried along the road. Besides the mineral passenger traffic will be considerable, as it will shorten the distance to those travelling south very many miles.

The members of the Social Science Association are now holding their annual meeting at Sheffield, under the presidency of Lord Brougham, the venerable, who is the guest of the Earl Fitzwilliam. At the time we write the preliminary matters have only just been gone through, and his Lordship has opened the proceedings with an inaugural address, or, what would be more appropriate, an essay upon things in general. Amongst the papers to be read is this—"What may be the unnecessary exposure of workmen to dangers of life and health be lost, especially in collieries, mines, and manufacturing?" The gentlemen who are to read on this question are Messrs. P. H. Holland, John Charles Hall, M.D., and W. P. Maddison. In the department of Economy and Trade, Mr. Thomas Hughes, M.P., and John Wilson, a Sheffield grinder, are to read—"What are the best means of an amicable arbitration between employers and employed in cases of strikes and lock-outs?" There is a special question set out to be discussed—"Is it desirable to consolidate the existing system of railways into one system of Government control?" Mr. Filmer and Mr. Hawes, Chairman of the Society of Arts, have this question in hand.

The proposition originated by the Stoke coal and ironmasters for forming a fund to resist the unjust demands of the men when on strike, has been received favourably in most districts in these counties, and many have intimated their intention of joining the same. The details of the scheme appear also to have met with unanimous approbation. It is to be hoped that a system of arbitration may be adopted for the regulation of most trades. The formation of societies of workmen, like the men as a sort of menace, and makes the feeling between employer and employed much bitter than it might otherwise be. Still whilst the men unite in societies for their own protection (?), the masters are driven to a similar course in self-defence. Whilst on this subject it will not be out of place to notice the broad contrast which exists at Clay Cross, Derbyshire, where, on Tuesday evening, the annual *soiree* of the workmen took place in a large hall which has been built by the company. Mr. Binns, the manager of the works, presided, and he was supported by Mr. Evans, the Government Inspector of Mines for the district; Mr. Busby, the coroner; the Rev. Mr. Malby, Rev. B. Mandale, and the Rev. Mr. Ungate, all of whom spoke of the general good conduct of the workmen, which is attributed to the liberality of the company. It was stated, in the course of the remarks made by Mr. Binns, that Derbyshire would ere long become the greatest mineral district in England. The company have put down an extensive plant at Morton, and in course of time a vast quantity of mineral will be raised, and a great population spring up where formerly nothing but agriculture was cultivated.

I hear that a large colliery in North Derbyshire is about to stop or change hands. The company was formed under limited liability, but the practical working of it has proved unsatisfactory. This is a matter to be regretted, as it cannot fail to produce a prejudicial effect. It was clothed with limited liability by the company-masters in London nearly two years ago, and was worked almost entirely with London capital. The local capitalists fought shy.

There has been nothing in the lead mining interest this week worthy of notice.

SINGLE SHAFT AND COLLIERY VENTILATION.—Proceedings still appear to be requisite to enforce the due observance of the law in regard to providing more than one outlet for the workpeople where more than 20 are employed in a colliery at one time, and to ensure adequate ventilation. At the Chorley Petty Sessions, on Sept. 26, before Messrs. T. B. Cross (Chairman), E. E. Silvester, T. T. Parker, and J. Rigby, Thomas Rymer Bourne, of Coppell Hall Colliery, was charged with having, on Aug. 26, unlawfully employed 21 persons in the above mine, and that there were not in communication with the seam of such mine at least two shafts or outlets, separated by natural strata of not less than 10 feet in breadth, by which shafts or outlets direct means of ingress and egress were available to the persons employed in the mine. Mr. W. P. Roberts, of Manchester, appeared for Mr. Joseph Dickinson, the Government Inspector of Mines for the district; and Mr. L. Rowbottom, of Wigan, for the defence. Mr. Rowbottom pleaded guilty; but said that there was a second shaft down to the mine, and asked the Bench not to impose any penalty. A second charge was that Thomas Rymer Bourne, on Aug. 29, neglected to cause a then duly established fan to be observed in the mine or shaft, by not causing an adequate amount of ventilation to be constantly maintained, and that in consequence of the defective ventilation, and the accumulation of gas in the mine on Monday, Aug. 27 and 28, Richard Marsden, who went into the gas, was suffocated. Samuel Green, the underlooker, recollected Aug. 29, the day on which Richard Marsden, the freeman, lost his life. He had been in the mine on the Monday, but not in the part where the accident occurred, and the ventilation was good. Names in the mine were five and six o'clock, deceased told him that there were two shafts in the mine where gas had collected, and that he had sent the men down a half-shaft below those parts. After Marsden had been suffocated, the pit was closed, and the gas could be got out. The place was 250 yards from the pit or shaft. By Mr. Bourne's bottom: If the bratticing had been all right the accident would not have happened. It was Marsden's place to see that the ventilation was right. He told him not to go into the gas, but he did so. By Mr. Silvester: It was the duty of the underlooker to examine the state of the mine; but it was the freeman's duty to look after the gas in a morning. Mr. Silvester said that it was his impression that Mr. Roberts' witness in not acting upon the report of the freeman had caused the accident. Mr. Roberts read an extract from the rules of the colliery, which provide that the underlooker should "examine all accessible parts of the mine under the supervision of the freeman, and on the day following the accident, he examined the pit, and found that there was not on the day following the accident, he examined the pit, and found that there was not sufficient means of ventilation. The mine ought not to have been opened until the amount of gas given off, until they got their second shaft down. A brattice was put up. He granted that they had got the amount of works they had with one shaft, but it was not sufficient for the amount of workings. Mr. Rowbottom, in defence, argued that if the brattice had not been out of order the ventilation would have been good as to have cleared the place of any gas. James Kay, the freeman, had been a collier for 15 or 16 years. The air in the mine was in a good state. His opinion the mine was sufficiently well ventilated, and he had had several complaints from the colliers that the air was too cold, which was produced by the gas being strong. The accident had happened through the bratticing being out of order, otherwise the place would have been safe and clear. Cross—examined by Mr. Roberts: The place where the man died was not sufficiently ventilated at that time. Thomas Smith, who the man died was the accident occurred. William Green, collier, said that on the Monday before Marsden met his death the air was good, and he knew that the ventilation was good as to have cleared the place of any gas. James Kay, the freeman, had been a collier for 15 or 16 years. The air in the mine was in a good state. His opinion the mine was sufficiently well ventilated, and he had had several complaints from the colliers that the air was too cold, which was produced by the gas being strong. 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TASSO BRAZILIAN GOLD COMPANY (LIMITED).

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CHARLES BARBER, Esq., Merchant, London (Director of the Calcutta and South-Eastern Railway).
WILLIAM CREMER, Esq., London (Director of the Terracotta Copper Company).
EDWARD JOHNSTON, Esq., Merchant, London, Liverpool, and Rio (Director of the London and Brazilian Bank).
SEBASTIAN PINTO LEITE, Merchant, London, Manchester, and Liverpool (Director of the Universal Marine Insurance Company).
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BANKERS.
Mercantile and Exchange Bank, 4, Lombard-street, London, E.C., and 40, Castle-street, Liverpool.

London. Messrs. Castello Brothers, 18, Throgmorton-street, E.C.
Liverpool. Messrs. Tod and Ashton, Liver-chambers, Tithe-chambers.
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TEMPORARY OFFICES.
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PROSPECTUS.

Gold is plentifully diffused in veins, lodes, and deposits of auriferous earth throughout Northern Brazil. But, in the absence of capital and skilled labour for its extraction, gold in that country is confined to the acquisition of private adventurers or aboriginal tribes.

This company, availing itself of the local knowledge and territorial possessions of Signor José Joaquim Tasso, situate in the heart of the gold districts of Parahyba, has determined, therefore, to undertake the production of gold in Northern Brazil on a scale and with such approved machinery as will render the enterprise one of immediate and great success.

In pursuance of this resolution, the company has entered into a provisional contract for the purchase and working of the estates of Signor Tasso at Pianco, in Parahyba, Brazil, on which estate eight gold-bearing lodes have already been discovered. An imperial concession for these purposes has been obtained.

Assays of ore from the lodes have yielded on the average 1 cwt. 9 dwts. 23 grs. per ton of ore, and five samples obtained from different parts of the Boa Esperanza lode yielded 2 cwt. 5 dwts. 15 grs. of gold per ton.

Recent extracts from the lodes have given even more extraordinary results. A report on them, says:—

I send you herewith copy of the assays I have made of your quartz, which are surprisingly rich, and which would pay enormously if the bulk should prove anything like the sample:—

No. 5.—Gold	02 dwts. grs.	0 10 12 per ton of 20 cwt.
“Silver	0 10 0	“
No. 6.—Gold	12 5 15	“
“Silver	3 15 0	“

Another sample, assayed by Messrs. Johnson, Matthay, and Co., of Hatton-garden, yielded:—

Gold	6-350 cwt. per ton of 20 cwt.
Silver	4-250

The grounds on which the adventure is recommended are:—

1.—That the provinces of Parahyba and Pernambuco, over which the rights of the company will extend, contain the richest gold mines in the empire.

2.—That, besides the lodes of gold, the locality contains an enormous quantity of auriferous ore detached from the lodes, available at comparatively little expense.

3.—That the neighbourhood being populous and fertile, labour is cheap, and supplies of cattle, corn, and other produce are easily obtainable.

4.—That a main road, along which a great part of the cotton exported from Pernambuco is now conveyed, runs through the site of the concession at Pianco.

5.—And, finally, that a moderate outlay appears sufficient to insure very large returns. If only 50 tons of ore per day were reduced, it is estimated that a year's operations at that rate would yield a profit on the cost of working of not less than £46,500.

Applications for shares, addressed to the directors, will be received in London by Messrs. Castello Brothers, 18, Throgmorton-street, E.C.; and by Mr. SEBASTIAN, 2, Austin Friars, Old Broad-street, E.C. In Liverpool, by Messrs. Tod and Ashton, Liver-chambers, Tithe-chambers, and in Manchester, by Messrs. Mewburn and Barker, Mould-street, Cross-street. But no application can be considered unless accompanied by a deposit of £1 per share on the number of shares applied for has been made. In the event of the directors not being able to accede to a request, the sum deposited will be promptly returned; and in cases of reduced allotment, the balances will be applied towards the full deposit of £2 per share.

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1862	222,279	72,781	821,061
1863	260,130	135,974	1,311,905
1864	742,674	236,244	3,212,300

JOHN ATKINS, Resident Secretary, London.

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ASSAYS AND ANALYSES.—MR. JOSEPH GREEN.

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In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the NORTH HALLENBEAGLE TIN AND COPPER MINING COMPANY (LIMITED).—TO BE SOLD, BY AUCTION, at the North Hallenbeagle Tin and Copper Mine, situate in the parish of St. Agnes, in the county of Cornwall, by the direction of the Court, on Thursday, 19th day of October inst., at Eleven o'clock in the forenoon, subject to such conditions as will be then and there produced, either together or in lots, the MINE SETTS or GRANTS of the said company, and the undermentioned MINING MACHINERY and MATERIALS, viz.:
ONE 45 in. cylinder PUMPING ENGINE, 8 ft. stroke, equal beam, with first piece of main rod, and BOILER about 13 tons, complete.
Balance-bob and connecting rod; shears, with pulleys and braces; 8 arm capstan, with span beam, &c.; capstan rope, about 22 cwt., and a quantity of other articles in general use in mines; also, the account-house furniture.
UNDERGROUND.—House water lift, 30 fms. of 6 in. lift, 6 tons 6 in. plunger pole; stuffing box and gland, about 6 cwt.; pole case, 6 cwt.; II and bottom doorpiece, 15 cwt.; a quantity of pumps and rods of various sizes, &c.
The mine and materials may be inspected at any time prior to the sale on application to the person in charge thereof, and further particulars, with conditions of sale, may be obtained of
HODGE, HOCKIN, AND MARRACK, Solicitors,
Dated Truro, October 4, 1885.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the CHIVERTON WHARF ROSE SILVER-LEAD MINING COMPANY.—By the direction of his Honour the Vice-Warden, notice is hereby given that, on the 20th day of October inst., at Eleven o'clock in the forenoon, at the Registrar's Office, Truro, in the county of Cornwall, this Court will PROCEED TO MAKE A CALL OF ONE POUND SIX SHILLINGS AND EIGHTEENPENCE PER SHARE on all the contributors settled on the list of contributors of the above-named company, under Class A. All persons interested therein are entitled to attend at the time and place aforesaid, to offer objections to such call.
WILLIAM MICHELL, Registrar.
Dated Truro, October 4, 1885.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the NORTH HALLENBEAGLE TIN AND COPPER MINING COMPANY (LIMITED).—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY are hereby REQUIRED TO COME IN AND PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's Office, Truro, on Tuesday, the 17th of October inst. And for the purpose of such proof they are either, to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the Court at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.
WILLIAM MICHELL,
Dated Truro, Oct. 4, 1885. Registrar of the above-named Court, Truro, Cornwall.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the TYWARNAHLE MINING COMPANY.—The Registrar of this Court has appointed the 24th day of October inst., at the Registrar's Office, at Truro, to SETTLE the LIST OF CONTRIBUTORIES OF THE ABOVE-NAMED COMPANY, now made out and deposited at the said office.
WILLIAM MICHELL, Registrar of the said Court.
Dated this 4th day of October, 1885.

In Chancery.

FOR SALE, THE THORNTON AND LUDWORTH COLLIERIES, IN THE COUNTY OF DURHAM.

TO BE SOLD, pursuant to a Decree of the High Court of Chancery, made in a Cause of Gully v. Wood and Others, with the approbation of the Master of the Rolls, in One Lot, by Mr. CHARLES BROUGHT, the person appointed by the said Judge, at the Queen's Head Hotel, Pilgrim-street, Newcastle-upon-Tyne, on Tuesday, the 31st day of October, 1885, at Two of the clock in the afternoon precisely, those IMPORTANT, very VALUABLE, and well known current-going sale COLLIERIES, called the THORNTON AND LUDWORTH COLLIERIES, in the county of DURHAM, the property of the Thornton Coal Company, containing, with their associated coal fields, 3725 acres, or thereabouts, together with the COLLIERY PLANT of pits, ENGINE HOUSES, ENGINES, MACHINERY, RAILWAYS, COKE OVENS, screens, stores, MATERIALS, live and dead stock, agents and workmen's houses, workshops, stables, granaries, farms, and all other erections and buildings whatsoever to the same several collieries belonging or appertaining and held therewith.

Particulars, with plan and conditions of sale, may be had gratis, and further information obtained (and all the collieries viewed), on application to Mr. JOSEPH SMITH, Jun., viewer, Monkwearmouth; Mr. THOS. BELL, viewer, Thornton Colliery; in London, to Messrs. WILLIAMSON, HILL, and Co., No. 10, Great James-street, Bedford-row; Messrs. SMITH and CROSSMAN, 9, King's-road, Bedford-row; Messrs. HUNT and MERRITT, No. 7, St. Martin's-place, Trafalgar-square; and Mr. JAMES CHOWDY, No. 37, St. Jean's Inn, Fleet-street; also in the country of Mr. THOMAS BELK, solicitor, Hartlepool; Messrs. R. P. and H. PHILLIPS and Messrs. GRIFFITHS and CROUGHTON, solicitors, Newcastle-upon-Tyne; or of the Auctioneer; at the place of sale; and at the principal inns in the counties of Northumberland and Durham.

In Chancery.

VICE-CHANCELLOR WOOD.
IN THE MATTER OF THE COMPANIES ACT, 1862, and IN THE MATTER OF THE CAPPAUGH MINING COMPANY (LIMITED).
THE CAPPAUGH COPPER MINE, IN THE COUNTY OF CORK, IN IRELAND.
MESSRS. ROBINSON AND HETLEY WILL SELL, BY PUBLIC AUCTION, at the London Tavern, Bishopsgate-street, in the City of London, on Thursday, the 19th day of October, 1885 (previously advertised as for sale by private contract), under an order of the High Court of Chancery, made in this matter, of date the 9th day of August, 1885, the INTEREST of the above-named company in this MINE, now in full work, and in the MACHINERY, PLANT, and STORES. Held in der an underlease, dated 29th September, 1862, for a term of fourteen years, are unexpired, at a rent certain of £50, and a royalty of one-sixteenth of sale moneys, clear of all deductions, or one-sixteenth of the minerals raised, with a surface rent of £2 10s. per acre. The underlease contains a covenant for renewal at option of lessee, without fine, for the further term of twenty-one years.

The workings consist of three large shafts, of which the skip-shaft has been sunk below the 94 ft. level, which is the deepest of nine levels. Each level has yielded fairly, and the value has considerably improved in depth, according to the mine captain's latest report. Over £20,000 has been expended by the company in the purchase and erection of first-class machinery in the works, &c.
For particulars and conditions apply to the Auctioneers. The original lease and underlease, and a full report on the mine by the mine agent up to 19th August, 1885, with working plans and inventory of plant, &c., may be seen, and orders to inspect the mine obtained on application to FRANKS WILKIN, Esq., 5, Serle-street, Lincoln's Inn, the Official Liquidator; to Messrs. HARRISON, 5, Wallbrook; and to Messrs. TUKER and VALPY, No. 17, Lincoln's Inn-fields, Solicitors for the Official Liquidator.

GREAT TYWARNAHLE MINE, ST. AGNES.

MESSRS. WARE AND SONS WILL SELL, BY AUCTION, on Friday, the 20th day of October inst., at Twelve o'clock at noon, the undermentioned VALUABLE ENGINES:—
ONE (Gardiner's) 70 in. cylinder ENGINE, 10 feet 6 inches stroke, with THREE BOILERS. TWO (Haynes's) 70 in. cylinder ENGINE, 9 feet 6 inches stroke, with THREE BOILERS. THREE 28 in. cylinder ENGINE, 9 ft. stroke, with crusher attached, and ONE BOILER.

The engines are in excellent condition, and will be on view until the day of sale, and further particulars may be obtained of the Auctioneers, Exeter, or of Messrs. FLUX AND ARGLES, Solicitors, 1, East India-avenue, Leadenhall-street, London; or of Messrs. HODGE, HOCKIN, AND MARRACK, Solicitors, Truro.
Dated Truro, October 4, 1885.

IMPORTANT AND EXTENSIVE SALE OF RAILWAY CONTRACTORS' PLANT.

MESSRS. WARD AND CHOWEN have received instructions from Messrs. York and Co. to OFFER FOR SALE BY AUCTION, at Tavistock, on Wednesday, the 26th, and at Launceston on Thursday, the 26th day of October, 1885, the whole of their valuable PLANT, now lying at the respective towns of Tavistock and Launceston, in the counties of Devon and Cornwall, consisting of upwards of 150 earth wagons, trolleys, and ballast trucks; about 200 tons of contractors' rails; wood and iron pug mills, mortar mills, iron piling tanks, double-purchase crabs, complete; single, double, and treble blocks; wheelbarrows and planks; chains of various sizes; the whole of the smiths' tools, bridge centres; a quantity of useful board and plank, connecting-rods, sledges, picks; cast steel, several tons of new and scrap iron; iron scales and weights, jumpers, pedestals, tool chests, mortar hods; carpenters' shops and benches, saw-pits and sheds; blacksmiths' shops, store rooms, offices, and stables, and every other requisite necessary for carrying on extensive railway operations.
The above valuable plant is in excellent working order, and is sold in consequence of the owners applying to the Court on the new line of railway recently opened between the towns of Tavistock and Launceston.
Descriptive catalogues of the various articles will be prepared and ready for delivery forthwith, and may be obtained on application to Messrs. York and Co.'s offices, No. 2, Royal Exchange-buildings, London, and Tavistock, and Launceston; or of the auctioneers at Uppaton, Milton Abbot, and Tavistock, Devon.
Dated Uppaton, Milton Abbot, Devon, Oct. 2, 1885.

MR. BURGESS, AUCTIONEER, VALUER OF MACHINERY, LAND, &c.

has on hand the FOLLOWING ENGINES and MINE MATERIALS:—24 in. DRAWING ENGINE complete, bright, three years old; Harvey and Co., engineers, Hayle Foundry. ONE 20 in. HORIZONTAL ENGINE complete, adapted for drawing, crushing, pumping, &c.; fly-wheels and bolters to each, winding gear, &c. TWO 70 in. PUMPING ENGINES. ONE 36 in. PUMPING ENGINE. SIX CORNISH BOILERS, 9 to 12 tons each. Capstan ropes, capstans; pumps from 6 in., following in size to 20 in.; plunger poles, H and doorpieces to match, 16 head stamps, and sundry other mine materials. Can be had at valuation now, or auction shortly. The above engines were made by Harvey and Co.; Sandys, Vivian, and Co., founders, Hayle, Cornwall.

DESIRABLE INVESTMENT.—A FREEHOLD ESTATE OF 140 acres, beautifully situated, overlooking the Severn and Bristol Channel, and rich in minerals (COAL and HEMATITE IRON ORE), FOR SALE, at a price scarcely in excess of its surface value.—Particulars of Mr. THOMAS BLAKE, estate agent, Bank Office, Ross, Herefordshire.

MATERIALS FOR SALE, BY PRIVATE CONTRACT, at EAST MARGARET MINE, LELANT, near the St. Ives Road Station, about one mile from Hayle:—

A 37 inch CYLINDER PUMPING ENGINE.
A 30 inch CYLINDER STAMPING ENGINE, 8 feet stroke, with 33 bands, complete.—A first-class machine; with 9 ton BOILER.
A 20 inch CYLINDER WINDING ENGINE, 4½ ft. stroke.—A first-class machine; with 9 ton BOILER; cage and fly-wheel complete.
One 8-arm CAPSTAN complete, 150 fathoms, 8 to 12 inch pitwork, with winding pieces, H-pieces, slack-seat pieces, poles, stuffing-boxes, glands, &c., complete, all in good working condition.
60 fms. 2½ in., 30 fms. 1½ in., and 20 fms. 1½ in. from pump rods; 3 horse wheels; complete; 200 fms. ¾ in. horse wheel chain; shaft tackle, with 12 ft. shavers; 12-ft. shavers; 25 fms. new tram rods; wood and iron tram wagons; large quantity of flange and other bolts, of various sizes and lengths; 2 to 3 tons flange iron from scrap plates; 4 to 5 tons scrap and old iron; several lots of new iron and steel.

STAMPS' FLOORS.

32 hand and patent frames, with launders and valves complete; 20 to 45 in. the knives; trunks, buddies, sheds, and dressing tools, complete.

SMITHS' SHOP.

236-inch bellows; anvils, vice, screwing stocks, mandrills, smiths' and miners' tools, complete. The account-house furniture, comprising tables, chairs, cooking apparatus, utensils, knives, forks, dinner set, ten at £2.

For further information, apply to the agents on the mine; or to Messrs. Hines and Son, Albert Street, Penzance.—August, 1885.

BLAKELEY HALL MINES.—TO CAPITALISTS AND OTHERS.—TO BE SOLD, OR LET, the very VALUABLE MINES OF COAL AND IRONSTONE under about 80 acres of surface, situate at OLDURST, near BLAKELEY, on the Stour Valley Railway, known as the BLAKELEY HALL ESTATE. This property contains the celebrated Thick, or Ten Yard Coal. The mines are now being worked in adjacent properties.—Any further particulars may be obtained on application to Messrs. THORNTON, LEA, and KIRBY, solicitors, Coventry; or Messrs. WOODHOUSE and JEFFCOCK, civil and mining engineers, Derby, and 11, Great George-street, Westminster, S.W.

COLLIERY TO LET, OR PARTNERS WANTED.

WANTED, A PARTNER or PARTNERS in the WATERLOO COLLIERY, near LEEDS; or, if preferred, the whole would be disposed of on reasonable terms, with immediate possession. There has been a recent valuation of the colliery by an eminent valuer, which will be shown to the applicants.—For particulars, apply to Mr. J. T. FENN, Waterloo Colliery, near Leeds; or to Messrs. FAYNE, Edmondson, and Fenn, Leeds.

CUMBERLAND.

TO BE LET, ON LEASE, the MINES of COAL and IRONSTONE belonging to E. S. Carwen, Esq., UNDER the MOOR CLONE and LILLY HALL ESTATES, near the town of WORKINGTON. Coal workings are being carried on in the properties adjoining the Moor Close estate, and new workings have been put down on several parts of the Lilly Hall estate, to a depth of 80 fms., and coal measures have been proved.—Further particulars may be obtained on application to (and tenders will be received by) Messrs. WOODHOUSE and JEFFCOCK, civil and mining engineers, Derby, and 11, Great George-street, Westminster, S.W.

COAL AND IRONSTONE.

TO BE LET, the VALUABLE MINERALS comprising the BLACK SHALE COAL and IRONSTONE under nearly 600 acres of land in the UNSTONE VALLEY, in immediate proximity to the Sheffield and Chesterfield Railway, now in course of construction.—For particulars, apply to Mr. E. G. GUNNING, mining engineer; or to Messrs. SHIPTON and HALLWELL, solicitors, Chesterfield.

LOCOMOTIVE ENGINES FOR SALE.—A good NARROW GAUGE SIX-WHEELED TENDER ENGINE, four wheels coupled, cylinders 15½ in. diameter, with a good six-wheeled tender. A FOUR-WHEELED NARROW GAUGE TANK ENGINE, by Manning, Wardle, and Co., nearly new, and in first-class working order; cylinders 9½ in., working pressure 120 lbs. per square inch.—Further particulars can be had on application to Mr. T. NELSON, Grasmont, by York, where the engines can be seen at work.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OZZELL STREET NORTH, BIRMINGHAM.

STEVEN BARKER begs to inform the Trade that he has the following articles for sale:—REFINED METALLIC NICKEL. OXIDE OF COBALT. (WIRE.) REFINED METALLIC BISMUTH. GERMAN SILVER—INGOTS, SHEET NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND CHEMICAL WORKS.

NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.

JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.

Reference.—Professor Miller, King's College, London.

CLAYTON, SHUTTLEWORTH, AND CO., ENGINEERS.

MANUFACTURERS OF PORTABLE AND FIXED STEAM ENGINES, MACHINERY FOR PUMPING, HOISTING, GRINDING, SAWING, &c. ENGINES FOR STEAM CULTIVATION, SELF MOVING ENGINES FOR COMMON ROAD and AGRICULTURAL PURPOSES GENERALLY.

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NEW MEDICAL GUIDE.
DR. SMITH, who has had twenty years' practical experience in the treatment of Debility, Spermatorrhoea, Disorders of the Nervous System, &c., has published **A GUIDE** (138 pages) for Self-Cure. Sent to any address on receipt of two stamps. **DR. SMITH** may be consulted personally (or by letter) in all private and confidential cases.—Address, **SMITH and Co.**, 8, Burton-crescent, Euston-road, London W.C. Consultations daily from Eleven to Five.

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total dist.	Per Share.	Last paid
1300	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—	—	11 3 0	0 15 0	Dec. 1884
4000	Bedford (cop.), Tavistock [L.]	2 6 0	—	—	11 11 0	0 2 6	Oct. 1881
1248	Boscawell (tin, cop.), St. Just	8 15 0	—	—	1 5 0	0 5 0	May, 1884
200	British State Company [L.]	7 0 0	—	—	483 15 0	3 0 0	Aug. 1885
10000	British Hematite Iron [L.]	7 0 0	—	—	9 per cent.	—	Aug. 1885
1000	Bromford (lead), Cardigan [L.]	12 0 0	—	—	6 8 0	0 6 0	Nov. 1884
1000	Bryn Gwyn (lead), Mold, [L.]	9 0 0	—	—	6 15 0	0 10 0	July, 1885
916	Cargill (silver-lead), Newlyn	15 8 32	30 32	—	11 15 0	0 13 6	Aug. 1885
1400	Carn Brea (cop.), Illogan	18 0 0	22	—	280 10 0	2 0 0	June, 1885
2880	Clifford Amalgamated (cop.), Gwan	30 0 0	19	19 20	25 6 0	0 10 0	June, 1885
2000	Copper Mines of England	25 0 0	—	—	7 1/2 per cent.	—	Half-yrly.
40000	Ditto (stock)	100 0 0	—	—	1 per cent.	—	Half-yrly.
467	Cwm Erddin (lead), Cardiganshire [L.]	7 10 0	—	—	16 15 0	0 10 0	June, 1885
128	Wymyston (lead), Cardiganshire [L.]	40 0 0	—	—	293 10 0	0 5 0	Sept. 1885
280	Darwent Mines (sil., lead), Durham	300 0 0	—	—	159 10 0	7 10 0	June, 1885
1324	Devon Gt. Con. (cop.), Tavistock [S.E.]	1 0 0	670	569 568	900 0 0	9 0 0	Sept. 1885
168	Dolcoath (cop.), Camborne [L.]	129 17 6	—	—	126 0 0	4 0 0	Nov. 1884
512	East Basset (cop.), Redruth [S.E.]	29 10 0	26 1/2	35 26	126 0 0	4 0 0	Nov. 1884
6000	East Carn Brea (cop.), Redruth	3 15 0	—	—	13 12 0	0 10 0	June, 1885
6144	East Caradon (cop.), St. Cleer [S.E.]	2 14 6	11 1/2	11 1/2	107 10 0	2 0 0	Aug. 1885
300	East Darren (lead), Cardiganshire [L.]	32 0 0	—	—	369 10 0	4 0 0	June, 1885
128	East Pool (tin, cop.), Pool, Illogan	24 8 0	—	—	9 0 0	0 2 0	Oct. 1885
4000	East Rosewarne (cop.), Gwinnar	2 1/2	2 1/2	2 1/2	67 0 0	1 0 0	May, 1885
2000	Foxdale (lead), Isle of Man [L.]	28 0 0	—	—	2 13 6	0 6 0	Aug. 1885
5000	Frank Mills (lead), Clrleton [L.]	3 18 0	—	—	3 5 0	0 14 0	Sept. 1885
13000	Great Laxey (lead), Isle of Man [L.]	4 0 0	22	20 1/2	17 10 0	0 17 0	Sept. 1885
5908	Great W. Vor (tin, cop.), Helston [S.E.]	4 0 0	—	—	15 0 0	5 0 0	Aug. 1884
119	Great Work (tin), Gernoe	100 0 0	—	—	485 10 0	3 0 0	Oct. 1885
1024	Herodstot (id.), near Liskeard [S.E.]	18 0 0	—	38 40	15 0 0	5 0 0	Aug. 1884
400	Lisburne (lead), Cardiganshire, Wales	18 10 0	—	—	3 2 0	0 2 0	Oct. 1885
2000	Maox-y-Bain (lead) [L.]	20 0 0	—	—	1 0 0	1 0 0	Oct. 1885
3000	Marze Valley (cop.), Cardigan	4 10 6	4	—	3 2 0	0 2 0	Oct. 1885
4000	Miners Boundary (lead), Wrexham [L.]	1 0 0	—	—	0 8 0	0 2 0	June, 1885
1800	Miners Mining Co. [L.] (id.), Wrexham	25 0 0	—	19	181 15 0	6 15 0	Aug. 1885
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	—	—	19 18 11	0 16 1	July, 1885
4000	Mynydd (iron ore), [L.] (S.E.)	2 10 0	—	—	0 4 0	0 3 0	April, 1884
250	Nanty (iron ore), [L.] (S.E.)	20 0 0	—	—	0 11 0	0 10 0	June, 1884
6000	New Birch Tor and Viller Co. (tin)	1 0 0	1 1/2	1 1/2	0 13 0	0 2 6	Feb. 1884
9236	North Treasurery (cop.), St. Agnes	1 0 0	3 1/2	3 1/2	147 0 0	5 0 0	Aug. 1885
292	Parys Mines (cop.), Anglesey [L.]	50 0 0	—	—	7 8 0	2 10 0	Aug. 1884
1123	Providence (tin), Uny Lelant [S.E.]	10 6 7 3/4	34	34 36	496 10 0	6 0 0	Sept. 1885
30	Silver Rake Mining Company	280 0 0	—	—	0 8 0	0 5 0	Mar. 1885
512	South Caradon (cop.), St. Cleer [S.E.]	1 5 0	—	—	17 10 0	0 10 0	June, 1885
4000	St. Day United (tin), Redruth	14 0 0	—	—	26 14 0	0 5 0	July, 1885
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0	18 1/2	18 19	6 15 0	1 5 0	Aug. 1885
6000	West Basset (cop.), Illogan [S.E.]	1 10 0	—	—	63 10 0	1 0 0	Nov. 1884
256	West Basset (cop.), Illogan [S.E.]	—	72 1/2	70 75	457 0 0	4 0 0	Aug. 1885
256	West Basset (cop.), Illogan [S.E.]	—	72 1/2	70 75	298 10 0	1 10 0	Oct. 1885
400	Wh. Basset (cop.), Illogan [S.E.]	5 10 0	—	—	15 0 0	0 10 0	Aug. 1884
512	Wh. Basset (cop.), Illogan [S.E.]	5 2 6	80	75 80	258 0 0	0 10 0	Aug. 1884
1024	Wheel Friendship (cop.), Devon	20 0 0	—	—	288 5 0	4 0 0	Mar. 1885
612	Wheel Jane (silver-lead), Kea	3 10 0	—	—	243 3 0	5 0 0	Mar. 1884
4295	Wheel Kitty (tin), St. Agnes	4 6 4	—	—	206 15 0	5 0 0	Aug. 1885
1024	Wh. Mary Ann (id.), Menheniot [S.E.]	8 0 0	5 1/2	—	52 12 6	0 12 6	Sept. 1885
100	Wheel Mary (tin), Lelant	26 2 6	—	—	15 3 0	0 6 0	May, 1885
80	Wheel Ovels (tin), St. Just, Cornwall	70 0 0	—	—	—	—	—
896	Wheel Setaon (tin, cop.), Camborne	58 10 0	260	195 200	—	—	—
1040	Wh. Trevelyan (sil., id.), [L.] (S.E.)	8 17 0	18	18 19	—	—	—
7000	Wicklow (cop.), [L.] Wicklow	2 10 0	—	—	—	—	—

* Dividends paid every two months. † Dividends paid every three months.

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

340	Boscan (tin), St. Just	20 10 0	—	—	36 10 0	1 0 0	Mar. 1882
256	Condurow (cop., tin), Camborne	76 10 0	85	85 85	85 0 0	2 0 0	June, 1882
2480	Cook's (lead), Illogan	18 15 0	—	84 84	1 7 0	0 7 0	May, 1887
1024	Craddock Hill (cop.), Redruth	1 0 0	—	—	2 7 6	—	Sept. 1882
1055	Craddock Moor (cop.), St. Cleer	9 0 0	—	—	0 10 0	0 4 0	June, 1885
4076	Devon and Cornwall (cop.), Tavistock	6 8 0	—	—	0 10 0	0 1 6	Feb. 1889
12800	Drake Walls (tin, cop.), Calstock	2 10 0	—	—	0 17 0	0 2 6	Jan. 1889
3000	Dyrnwy (lead), Wales	12 6 0	—	—	1 10 0	0 10 0	May, 1884
1906	East Wheal Lovell (tin), Wendron	3 9 0	16 1/2	15 1/2	41 9 0	0 2 6	Dec. 1881
940	Fowey Consols (cop.), Tywardreath	4 11 6	—	—	7 18 0	0 5 0	Dec. 1881
6000	Great South Tois (cop.), Redruth	0 14 6	1 1/2	—	0 3 0	0 1 6	Mar. 1882
10240	Gunnislake (Clitters' Adit) (cop.)	0 2 0	—	—	1091 0 0	8 0 0	May, 1880
180	Levant (cop., tin), St. Just	2 10 0	—	—	18 18 1	0 7 6	Mar. 1882
440	Mount Pleasant (lead), Mold	0 0 0	—	—	0 19 0	0 8 0	Mar. 1882
5000	Oradell (lead), Flintshire	0 0 0	—	—	0 19 0	0 8 0	Mar. 1882
1772	Pelberron (tin), St. Agnes	15 0 0	—	—	0 10 0	0 1 6	Nov. 1885
612	Pelberron (tin), St. Agnes	8 0 0	—	—	74 10 0	1 0 0	Nov. 1885
6000	Rosewall Hill and Ransom United	3 0 0	—	—	370 18 6	1 0 0	Nov. 1885
512	South Tois (cop.), Redruth	8 0 0	—	—	9 15 0	1 0 0	June, 1884
496	S. Wh. Frances (cop.), Illogan [S.E.]	18 18 0	17 1/2	16 1/2	490 10 0	0 10 0	May, 1884
280	Spearman Moor (tin, cop.), St. Just	3 17 0	—	—	7 0 0	0 10 0	Sept. 1884
940	St. Ives Consols (tin), St. Ives	15 10 0	—	—	11 0 0	2 0 0	Mar. 1880
572	Trevelyan Consols (tin), St. Ives	15 10 0	—	—	6 2 6	0 10 0	Mar. 1884
1000	Trumpton Consols (tin), Helston	11 0 0	—	—	10 1 0	0 10 0	Oct. 1882
4900	Vigra and Clogon (cop.) [L.]	5 0 0	—	—	10 2 0	0 7 6	July, 1884
1024	West Caradon (cop.), Liskeard [S.E.]	11 0 0	10	9 1/2	76 5 0	1 0 0	May, 1885
1000	Wheal Basset and Grylls (tin)	7 0 0	7 1/2	6 1/2	6 1 8	0 5 0	Nov. 1885
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	3 0 6	7 1/2	7 1/2	0 19 0	0 8 0	May, 1882
896	Wheal Margaret (tin), Uny Lelant	13 17 6	—	—	—	—	—
2044	Wheal Tremayne (tin), Gwinnar	6 11 3	—	—	—	—	—
6400	West Fowey Consols (tin and cop.)	7 10 0	—	—	—	—	—
8000	Wharfedale Mining Company [L.]	0 5 6	—	—	—	—	—

FOREIGN DIVIDEND MINES.

3484	Burra Burra (cop.), South Australia	5 0 0	62	—	320 0 0	5 0 0	Sept. 1884
15000	Cape Copper Mining [L.] [S.E.]	7 0 0	11	11 1/2	2 2 6	0 17 6	June, 1885
10000	Cobre Cop. Co. (cop.), Cuba [S.E.]	40 0 0	—	20 22	101 0 0	1 0 0	Jan. 1885
70000	English and Australian (cop.)	10 0 0	—	—	1 12 0	0 2 0	Aug. 1884
15000	East Indian Coal, Calcutta [L.]	10 0 0	—	—	1 1/2 per cent.	—	Yearly.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	3 1/2	3 1/2	21 10 0	0 8 0	Dec. 1884
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	30 0 0	23	21 23	0 13 0	0 1 0	June, 1884
80000	Kapunda Mining Co., Australia [S.E.]	1 0 0	—	—	0 13 0	0 1 0	June, 1884
15000	Linares (lead), Spain [L.] [S.E.]	3 0 0	3	2 3	11 6 4	0 5 0	Jan. 1885
10000	Lusitania (Portugal) [S.E.]	2 0 0	—	—	1 7 0	0 3 0	June, 1885
9278	New Wildberg (cop.)	2 0 0	—	—	0 10 0	0 10 0	Aug. 1884
80000	Panellote (cop.) [L.] [S.E.]	3 0 0	—	—	10 per cent.	—	Yearly.
10000	Port Phillip (sil., lead), France [S.E.]	20 0 0	—	—	2 3 0	0 16 0	Dec. 1884
75000	Port Phillip (sil., lead), France [S.E.]	14 0 0	—	—	0 13 6	0 1 0	July, 1884
11000	St. John del Rey [L.] [S.E.]	15 0 0	40	39 41	63 15 0	2 10 0	June, 1884
43174	United Mexican Rail., Mexico [S.E.]	28 5 0	3 1/2	3 1/2	0 15 0	0 5 0	Sept. 1884
10000	Vancouver (coal) [L.] [S.E.]	8 0 0	—	—	5 per cent.	—	—
80000	Victoria (London) [L.] [S.E.]	1 0 0	—	—	0 19 6	0 2 6	May, 1885
40000	West Canada Mining Co. [L.] [S.E.]	1 0 0	—	—	—	—	—

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quenangen Uni. (cop.) [L.] [S.E.]	4 10 0	—	—	4 5 0	0 15 0	Nov. 1883
30000	Australian (cop.), S. Australia [L.]	7 0 0	—	—	4 10 0	0 10 0	Dec. 1883
4000	Central American (silver) [L.]	5 0 0	—	—	4 6 8	0 14 0	Dec. 1883
10000	Copiapu Mining Company, Chile [S.E.]	16 0 0	—	—	6 18 0	0 10 0	Nov. 1882
100000	Don Pedro No. Del Rey [L.] [S.E.]	0 14 0	—	—	0 9 0	0 9 0	Dec. 1883
138215	Mariposa and New Granada [S.E.]	1 0 2	—	—	0 5 0	0 1 6	July, 1889
45000	Yudamantana (cop.), S.A. [L.] [S.E.]	8 0 0	1 1/2	1 1/2	0 5 0	0 5 0	Aug. 1885

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.	
25000	Alamillos (lead), Spain [L.] [S.E.]	1 10 0	—	1 1/2	1 1/2	Apr. 1885
100000	Anglo-Brazilian (gold) [L.] [S.E.]	0 7 0	—	—	—	Dec. 1883
20000	Beara Tin Streaming Company [L.]	0 17 6	—	—	—	Oct. 1883
25000	Capula (silver), Mexico [L.] [S.E.]	1 5 0	—	—	—	Feb. 1884
10000	Copiapu Smelting [L.] [S.E.]	10 0 0	—	—	—	—
800	Copper Mines' Co. of S. Australia [L.] [150 £100 p., 150 £50 pd.]	1 0 0	—	—	—	—
7000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	—	—	—
50000	East del Rey (gold), Brazil [L.] [S.E.]	2 5 0	—	1 1/2	1 1/2	Apr. 1885
18000	El Chico Silver Mining and Reduction Company [L.]	4 0 0	—	—	—	Aug. 1865
8000	Engilash and Canadian Mining Company [L.]	8 0 0	—	—	—	—
40000	Fortune (copper), West Australia [L.]	2 0 0	—	—	—	—
50000	Frontino and Bolivia (gold), New Granada [L.] [S.E.]	1 0 0	—	5 1/2	3 3/4	Mar. 1885
10000	Gonnessa (lead) [L.] [5000 £5 paid, 5000 £1 paid]	—	—	—	—	—
80000	Great Northern (copper), South Australia [L.] [S.E.]	1 10 0	—	—	—	—
10000	Great Barrier Land, Mining, &c., New Zealand [L.]	5 0 0	—	—	—	—
24000	Hindostan (copper), Bengal [L.] [S.E.]	3 0 0	—	—	—	—
4000	Hop Silver-Lead and Copper Mining Co. [L.] [S.E.]	25 0 0	—	—	—	—
100000	Monte Aurore (gold), Brazil [L.] [S.E.]	2 0 0	—	—	—	—
12000	Nerbuda Coal and Iron [L.] [200 £600 25 pd., 2000 £3 pd.]	—	—	—	—	—
5000	Nova Scotia (land and gold) [L.] [S.E.]	1 0 0	—	—	—	—
10000	Ore (copper) New Zealand [L.] [S.E.]	1 0 0	—	—	—	—
24000	Pachuca Silver Mining Company, Mexico [L.] [S.E.]	1 0 0	—	—	—	—
100000	Pail River Land and Mines (Limited)	100 0 0	—	—	—	—
15000	Quebrada (copper), Venezuela [L.] [S.E.]	8 10 0	—	—	—	—
178	Rhenish Consolidated (lead) [5000 £5 paid, 4178 30s. paid.]	—	—	—	—	—
10000	Rosca Grande (gold), Brazil [L.] [S.E.]	0 5 0	—	—	—	—
10000	San Roque (lead), Spain	5 0 0	—	—	—	—
10000	Santa Barbara (gold), Brazil [L.] [S.E.]	0 17 6	—	—	—	—
10000	Scottish Australasian Mining Company [L.] [S.E.]	0 17 6	—	—	—	—
10000	South Europe Mining Company, Spain [L.] [S.E.]	8 0 0	—	—	—	—
10000	Val Antigua (gold) [L.] [S.E.]	0 0 0	—	—	—	—
10000	Val Saasam (silver, copper, and lead) [L.] [S.E.]	4 0 0	—	1 1/2	—	—
10000	Valgodemard Mining Company [L.] [S.E.]	15 0 0	—	—	—	—
10000	Vallianassam (gold), Italy [L.] [S.E.]	0 10 0	—	2 1/2	3 1/2	—
10000	Victor Emanuel (copper), Italy [L.] [S.E.]	1 0 0	—	—	—	—
10000	Washoe (gold) [10000 £25 paid, 10000 £3 paid]	—	—	—	—	—
10000	Western Africa Malachite (copper) [L.]	110 0 0	—	—	—	—
10000	Whael Ellen (copper), South Australia [L.] [S.E.]	1 0 0	—	—	—	—
10000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	—	—	—	—
10000	Yorke Peninsula, South Australia [L.] [S.E.]	1 0 0	—	—	—	—